

MACDONALD COLLEGE JOURNAL

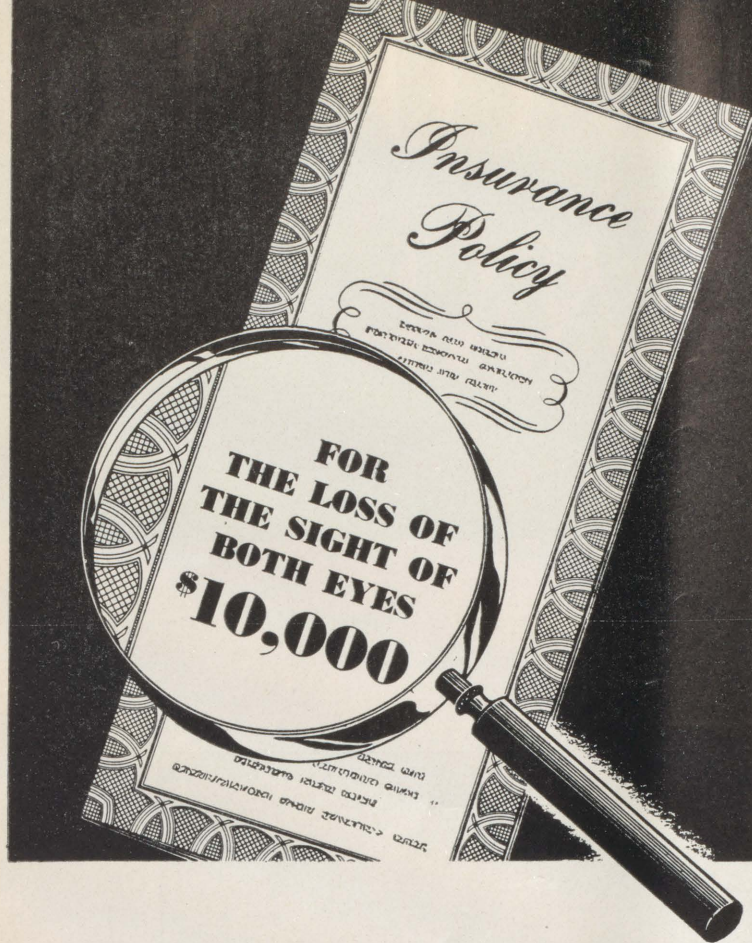


VOLUME 5
No. 8



APRIL
1945

Farm · Home · School



Insurance policies are very generous when it comes to paying for the loss of eyesight. They count the eyes the most valuable feature of the human make-up. Good lighting is the best kind of sight insurance. Check up on your lamps and sockets today. Some bulbs may be dim—almost burnt out. Some sockets may be empty. Fill them and keep a reserve supply of lamps always on hand. Your eyes will thank you.



**THE SHAWINIGAN
WATER & POWER CO.**

ELECTRICAL POWER • INDUSTRIAL CHEMICALS



Extra
**QUALITY
MILDNESS
VALUE**

Roll your own
for extra mild,
fine Virginia cigarettes.



MORE MEAT NEEDED

In the many reports, both at home and abroad, telling of shortages, rations and exports of surplus food products one point stands out clearly as of prime importance, namely, that there is a world shortage of meat.

The vast emergency stores of Britain are being used in helping to feed the liberated countries and this in spite of rigid rationing. The United States have been shipping out great quantities under the Lend Lease agreement and have suddenly realized that they will not have sufficient to maintain these shipments and feed their huge armies without drastic reductions in home consumption. To overcome the shortage Lend Lease shipments have been reduced and domestic rations cut 12 percent.

Many people in Canada have become concerned over this situation and the trend our agricultural production is taking. This was pointed out quite clearly in a recent broadcast by the Deputy Minister of Agriculture when he said, "We are at the crossroads; we must expand and grow or we must be prepared to let others step in and take our place."

The special interest in meat production in Canada at the moment centers around our hog production. We have established a great reputation during the war period, for being able to increase our quantity enormously and at the same time maintain our quality. It is not necessary to quote figures to prove this point. The tide however, appears to be changing direction. We appear to be losing interest in hogs since our production has dropped approximately 32 percent to date in 1945 as compared to 1944. This drop in production has been greatest where the expansion has been greatest. This expansion took place in Western Canada when there

was a limited market for grains. Now that wheat is over a dollar per bushel on the farm and other grains are relatively high, the farmer has an alternative to hog and cattle production. This alternative has appealed to many farmers in both Eastern and Western Canada because of the acute labor shortage.

In spite of these and any further arguments which may be advanced, however, we should keep our commitments in mind. Canada has guaranteed to ship 450 million pounds of bacon this year and we will be lucky if we can reach that total without shipping a larger proportion of the lower quality grades. This we don't want to do at this particular time when not only is so much depending on us, but when we have the added advantage of being in on the ground floor when things become more normal and when grain might again become a serious problem. Meat cannot be produced overnight. It takes planning and time, not only on the part of the farmer but on the part of those who determine policy as well. We perhaps cannot do much for this year at this time but people will need more meat and Canada will be expected to supply her share. A market is assured. There is ample beef and to a lesser extent lamb available, to supply even more than we do, for export. This slack will no doubt be taken up when shipping becomes less difficult. In the meantime meat producers should look to the future. We will need export markets after the war. Establishing ourselves on these markets with quality products now, will mean much for the future of the industry.

Our Cover Picture

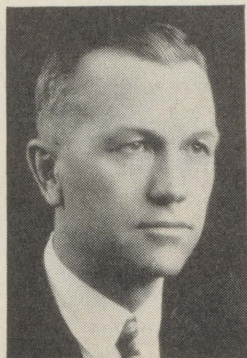
Part of the College sheep flock. Photo by W. E. Whitehead.

The Macdonald College Journal is owned, edited and published monthly by Macdonald College. All correspondence concerning material appearing in the Journal should be addressed to: The Editor, Macdonald College, Que.

Chairman of the Board: W. H. Brittain, Ph.D., *Editor,* A. B. Walsh, B.Sc.(Agr.): *Associate Editor,* H. R. C. Avison, M.A. *Circulation Manager,* L. H. Hamilton, M.S. *Business Manager,* T. Fred Ward. For advertising rates and all correspondence concerning the advertising section write to the *Advertising Representative,* E. Gross, 6381 de Vimy Ave., Montreal; telephone ATlantic 4739. Subscription rates — 50 cents per year.

Canadian Agriculture in 1945

From an address by Dr. G. S. H. Barton, Deputy Minister, Dominion Department of Agriculture, Ottawa, over the Canadian Broadcasting Corporation network.



Dr. Barton

Canadian agriculture is standing at the crossroads. It has come far along its upward path since war began, but now it has reached a parting of the ways. Depending on the choice made now, Canadian agriculture may gradually relinquish the export position it has reached with a number of major products and wander back to the more limited field of home consumption and restricted export. Or it may choose the highway stretching out to the markets of the world. . . .

By all their former standards, Canadian farmers are today well off. Farm income is higher than it has ever been — thanks to the unparalleled output of wartime agricultural production to meet the needs of an export market. . . .

Three years ago we saw income from the sale of farm products in Canada soar above the billion dollar figure, and last year it reached approximately a billion and three quarter dollars — highest in our history. Contributing to this record farm cash income in 1944 was a record return from field crops of \$761 million. A still greater proportion of the total farm income, \$913 million, came from the sale of livestock and livestock products. In this year of record production and record return, the export market in terms of farm values represented over one-third. This may be interpreted to mean that from their scores of millions of acres of field crops and pasture, Canadian farmers can feed 30 per cent to 40 per cent more people than there are in the Dominion. Indeed, if the Canadian farmer does *not* produce from 30 to 40 per cent more food than Canada needs, his income suffers.

What can be done to absorb this surplus production? Increased population? Even tremendously increased immigration could not increase Canada's population by 30 to 40 per cent in a short time. The only practical solution to disposing of 30 to 40 per cent more food than Canada can consume is to export it. The alternative would be to shrink agricultural production. You can imagine only too clearly how painful — and destructive — would be such a restriction. If, then, you agree with me that Canadian agriculture must export in order to prosper, you will also agree that these exported foods must be of the kind that the export market needs. For it is the buyer who decides what we should produce.

Recommendations for 1945

In Ottawa last December, the Agricultural Supplies Board held a Dominion-Provincial Conference on Agri-

culture. It was attended by representatives of the Dominion and Provincial Departments of Agriculture, and by the heads of farmers' organizations. . . . And this conference concluded by making definite recommendations.

What are these recommendations for Canadian agricultural production in 1945? In brief, an attempt to maintain production of the quantity and kind achieved in 1944 — with this exception: the conference agreed on the desirability of reducing the production of wheat. Reduce wheat, we agreed, but maintain our production of meat. The fact is we are long on wheat but short on meat. Let me emphasize that fact even more forcibly: we are in danger of being even longer on wheat and even shorter on meat than we were at the time of the conference. Yet what is happening in Canada at the present time? Hog marketings are down. By the end of this month, (March) they will be about 32 per cent lower than in the first quarter in 1944. While these marketings are not expected to continue at such low levels, their decline may not be greatly arrested until toward the end of the year. Canada has agreed to supply a minimum of 450,000,000 pounds of bacon and pork products for each year, 1945 and 1946. But Britain needs all that we can ship. And yet with this assurance of quantity — and of price — and in the face of Britain's urgent need, hog production has been drastically reduced.

Overseas Market Needs Regular Supplies

Canada has today almost a monopoly of the British bacon market. That will not always be so, but we are in a position to produce a product that will satisfy that market when the war is over. The share of that market which Canada should continue to have cannot be retained except on a basis of regular supplies. The West has made the biggest contribution to Canada's wartime expansion of hog production. But if the West continues to reduce hog production the future of our agriculture will be all the more critical — not only for the West itself, but for farmers everywhere in the Dominion.

On the individual farm of Western Canada, and particularly in those areas that are equally suited to the production of coarse grains and livestock on the one hand and wheat growing on the other, there is bound to be a contrast of the advantages of growing wheat for sale with those of producing more of the coarse grains and selling at least some of these through hogs. From the standpoint of Canadian farmers as a whole, or even of Western farmers as a whole, the choice is not one of wheat *or* hogs. We must produce as much as we can sell of *both*.

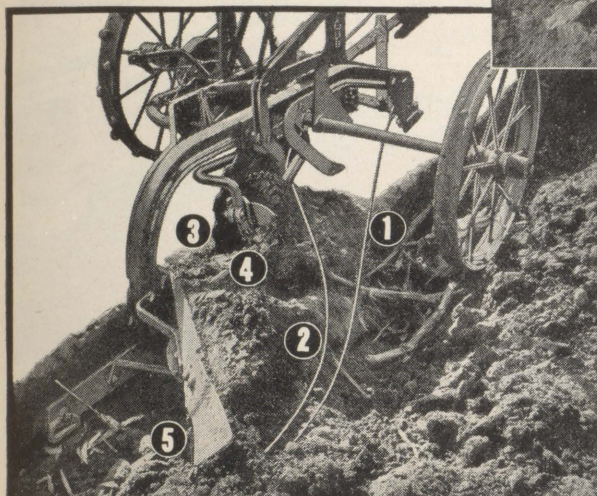
World Shortage of Meat

Western farmers will not have missed the significance of the recent reduction of the Canadian wheat quota for
(Continued on page 30)

New Ways to make the PLOW a SOILBUILDER



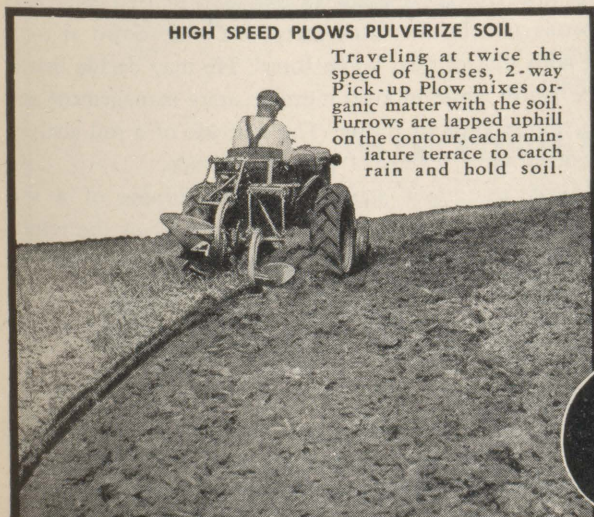
DOTTED LINE SHOWS finished outline of terrace constructed with regular A-C Moldboard plow. A narrow "island" strip of unplowed sod is left in the center to prevent break-thru of run-off water. Write for book described below, giving instructions for locating contour lines.



PLOW CORNSTALKS ON THE CONTOUR

Clean plowing buries the borer. Contour furrows catch run-off water, stop leaching of bare soil. This shows how to equip a plow to turn cornstalks completely under.

1. 10-foot wire attached to drawbar.
2. 10-foot wire attached to coulter shank, threaded through yoke, under coulter hub.
3. Plain or notched coulter.
4. Jointer.
5. Moldboard extension wing.



HIGH SPEED PLOWS PULVERIZE SOIL

Traveling at twice the speed of horses, 2-way Pick-up Plow mixes organic matter with the soil. Furrows are lapped uphill on the contour, each a miniature terrace to catch rain and hold soil.

MUCH discussion and thought of recent months has centered around the plow. It's a healthy sign of progress in the making.

As the basic tool of agriculture, the plow . . . if used intelligently . . . can open the door to soil conservation for every farm.

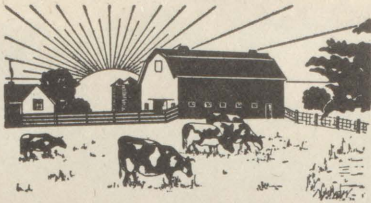
Here are pictured new methods of tractor plowing to *preserve* the soil . . . methods which are paying immediate benefits in higher yields and fuel savings.

Developing practical methods of soil building with regular *home-owned* family farm equipment has been a planned objective of Allis-Chalmers. We believe the adaptation of regular farm machines to the advancing science of soil conservation is an important development in tomorrow's agriculture.

• • •

FREE—CONTOURING AND TERRACING GUIDEBOOK gives complete "how to do it" instructions. Mail a postcard for this valuable book, published by Allis-Chalmers in the interest of soil conservation.

ALLIS-CHALMERS
RUMELY LTD. — TORONTO
TOOLS FOR THE JOB



AGRICULTURE

Articles on problems of the farm

How Can I Use a Soil Analysis?

by W. A. DeLong

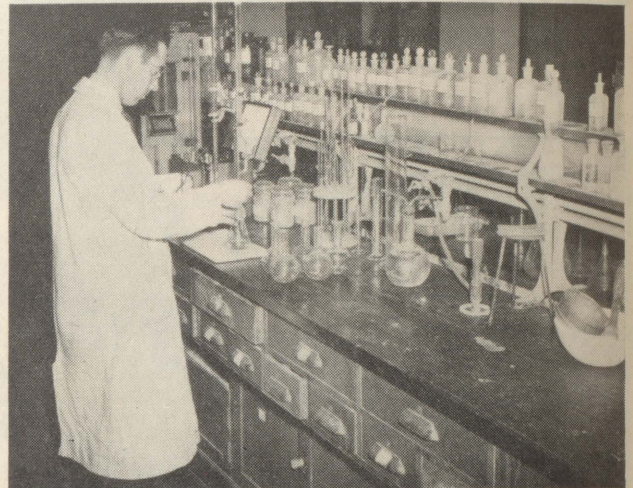
This season's Farm Radio Forum discussions brought soil analysis to the attention of the farming community in a nation-wide way. This is as it should be. Here is a useful tool; it should not be neglected. Experience teaches, however, that there is much misunderstanding of the purposes, possibilities and value of soil analysis, or soil testing, as it is more often called.

Soil analyses may be made in different ways and for different purposes. For example, the kind of analysis required for a systematic soil survey is, in some respects, different from that used for estimating soil fertility. Various methods are used for the latter purpose also. The one most often talked of in this connection, and most widely used for this purpose, is the rapid test method.

With respect to soil analysis in general and the rapid test method in particular, a popular view is that it gives a complete and final answer to such questions as, 'Does my soil need fertilizer?' 'How much and what kind shall I apply?' A common request is, 'Please test this soil and tell me what it needs.' Usually, such a request is not accompanied by any information on the past history of the soil, and often there is no indication of the crop which it is desired to grow on it. Further, the only use which the inquirer expects to make of the test is to buy the materials recommended and put them on the land. When such an attitude is taken much of the possible usefulness of a soil analysis is lost.

It is true that a soil analysis may result in a recommendation to use a certain fertilizer. It is also true that if the recommendation is followed improved crop production may result. But, this may not be the result. If it isn't, soil analysis is likely to be discredited at once. Lack of the expected result may have been due to failure to apply the fertilizer in the right way, or, more important, failure to prepare the land properly. In other instances failure may have been due to seasonal conditions. A relatively poor soil, by test, may yield a good crop under favourable weather conditions. One reason for this is that the chemical soil test attempts to do in a few minutes what the plant in the field takes weeks or even months to accomplish, depending on the kind of crop. It is therefore not surprising that the results of such tests do not invariably give correct indications of the needs of the soil.

Under the best conditions a soil analysis begins to give



Testing soil samples at the Macdonald College laboratory.

value with the taking of the soil sample. Governmental and other agencies providing a soil-testing service ask that certain information respecting the sample be provided. In order to supply this information and to take the sample correctly a certain amount of stock-taking is necessary. Such features as the cropping and management practices followed, and such conditions as drainage, erosion, and local soil variations within the field are brought to the attention. The farmer who is studying his business will take this opportunity to consider whether or not his cropping and management practices have been of the best. He will give some thought to the cost in lowered crop yields of erosion and of imperfect drainage. He may ask himself why it is that production by the 'back forty' has gone down as compared with that of the 'home forty'. He may decide that it will be worth while to keep more accurate management and production records in future. The first use of a soil analysis is to encourage a review of present practice.

A very important stage in the usefulness of a soil analysis begins with the arrival of the report of the results of the test. Actually, much greater usefulness is realized if this stage begins earlier. That is, if the one who receives the report has prepared himself beforehand to understand it.

One of the most important and reliable of the items of the report is the statement of the soil pH. This is a measure

(Continued on page 28)

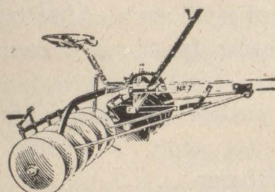
**"COCKSHUTT
HARROWS
do a MAN SIZE JOB"**



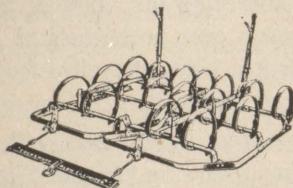
**"A Bigger Yield from
Every Field"**



**2 POPULAR HORSE
DRAWN HARROWS**



No. 7 DISC HARROW



**2-SECTION 15 TOOTH
HARROW**



**"That's Good News...
Because a harrow is
an implement that
really has to take it"**

**YES, MR. FARMER, AND THERE'S A TYPE
AND SIZE FOR EVERY FARM!**

For "A Bigger Yield From Every Field" give your land a better break. And to do this you need a **COCKSHUTT HARROW** for fast, efficient soil preparation. You need a Cockshutt Harrow because they're husky and do a man size job. They provide uniform penetration, deep or shallow and operate smoothly and easily. Cockshutt Disc Harrows have the dish or curvature for most efficient work and *they hold their cutting edge*. They are obtainable in both tractor and horse drawn sizes. In addition to Disc Harrows, the line includes Cockshutt's very popular Spring Tooth and Spike Tooth Drag Harrows.

See Your AUTHORIZED COCKSHUTT DEALER *Today!*

or write nearest branch office for illustrated literature on any tillage, seeding, haying, harvesting or chore machinery you require!

COCKSHUTT

PLOW COMPANY LIMITED

**TRURO MONTREAL
SMITH FALLS**

BRANTFORD

**WINNIPEG REGINA SASKATOON
CALGARY EDMONTON**

Seed Treatment

by R. A. Ludwig and E. Lavallee



Seed treatment pays through the increased seedling emergence, the increased crop vigour and the increased freedom from disease that it produces. It acts by destroying the disease-producing microorganisms that are carried on the surface of the seed and also by protecting the seed from the disease-producing and seed-rotting microorganisms that lurk in the soil. This protective effect is particularly important when the seed is planted in cold wet soil because the seed germinates slowly and is therefore susceptible to attack for a longer period of time. It must be remembered, however, that seed treatment cannot be made to compensate for poor seed. The general rule should be to buy good seed and then to treat it.

Vegetable Crops

Plant	Material to use	Rate of application	Remarks
Cucumbers and Melons	Red copper oxide or Semesan	1 teaspoonful per pound	
Tomato, Spinach, Eggplant, Carrot and Beet.	Red copper oxide	1 teaspoonful per pound	Rough coated seeds tend to hold toxic amounts of disinfectants containing mercury.
Cabbage and Cauliflower	Semesan	$\frac{1}{2}$ teaspoonful per pound	Cruciferous crops are subject to injury from red copper oxide.
Peas and Beans	Spergon	2 ounces per bushel	In the case of beans it is important to use seed free from blight and anthracnose as they are not controllable by seed treatment.
Corn	Semesan Jr.	$1\frac{1}{2}$ ounces per bushel	Seed treatment is particularly advantageous for very early plantings.

Treatment may be accomplished by shaking the seeds in a bottle with the correct amount of dust and then screening off the excess. For large quantities of seed a barrel type of treater such as the one illustrated in the cut may be used. For small quantities a small amount of dust picked up on the end of a toothpick may be put directly in the envelope, the envelope shaken and the excess dust screened off.

Oats

1. Formalin treatment

The treatment of oats with formalin for smut control may be done in two ways.

(a) Sprinkle method

Prepare a solution consisting of 1 pint of formalin in 40 gallons of water. Sprinkle this over the grain with a watering can while it is being shovelled from one pile to another on a clean floor. Every kernel should be thoroughly moistened with the solution. It will require about a gallon of solution for each bushel of grain. After treating cover the grain with moist sacks for about 4 hours and then spread out to dry.

A more laborious method consists of immersing the grain in the solution for about 2 minutes instead of sprinkling it with the solution.

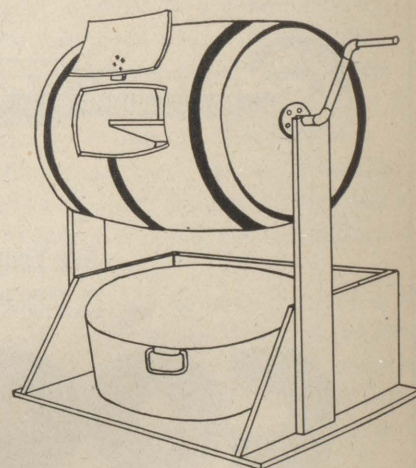
(b) Dry method

Prepare a solution consisting of 1 pint of formalin in 1 pint of water. Spray this over 50 bushels of grain with a fine garden sprayer as it is being shovelled from one pile to another on a clean floor. Cover the grain for 4 hours.

Caution — Do not treat hulless oats with formalin. Plant the grain the day following treatment in order to avoid excessive formalin injury.

2. New Improved Ceresan treatment

New Improved Ceresan is a dry treatment applied at a rate of $\frac{1}{2}$ ounce per bushel. Treatment may be accomplished by shovelling the grain over two or three times with the required amount of dust; by rotating the grain and dust in a home made barrel treater of the type illustrated; or by passing the grain through a mechanical treater. After treatment the grain should be stored in



porous sacks or an uncovered pile for at least 24 hours before planting.

Barley

1. Formalin

The sprinkle method as described for oats may be used to control covered smut. The dry treatment should never be used with barley.

2. New Improved Ceresan

The New Improved Ceresan treatment may be used as described for oats.

3. Hot water

This treatment is the only method known for controlling barley loose smut. It is practical only for treating small lots of grain unless special equipment is available. The treatment consists of soaking the grain in water for 4 to 6 hours at room temperature. The grain is then pre-heated by immersing in water at 120°F for 2 minutes. Finally it is heated in water at 128°F for 10 minutes. Following the heat treatment the grain should be cooled immediately by plunging in cold water and then spread out to dry. The temperatures and times given should be adhered to closely as a slightly higher temperature or longer time will kill the grain and a slightly lower temperature or shorter time will fail to destroy the smut. Treated grain should be stored for a week before planting as germination is usually low immediately after treatment but approaches normal again at the end of a week.

Flax

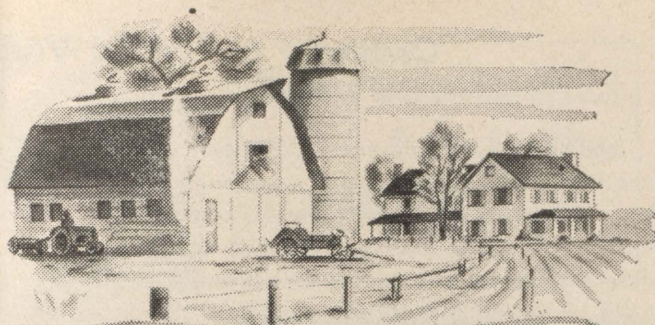
New Improved Ceresan should be applied to flax seed at a rate of 1½ ounces per bushel. The methods of application described for oats may be used. Treated flax seed should not be stored for more than four weeks before planting.

Caution — The seed disinfectants recommended are poisonous. Treating should be done either out of doors or in a well ventilated room. Containers used for the dry treatments should not be used for other purposes. Cans of the disinfectants and treated seed should be kept away from children and livestock. Special precautions advised by the manufacturers should be adhered to.

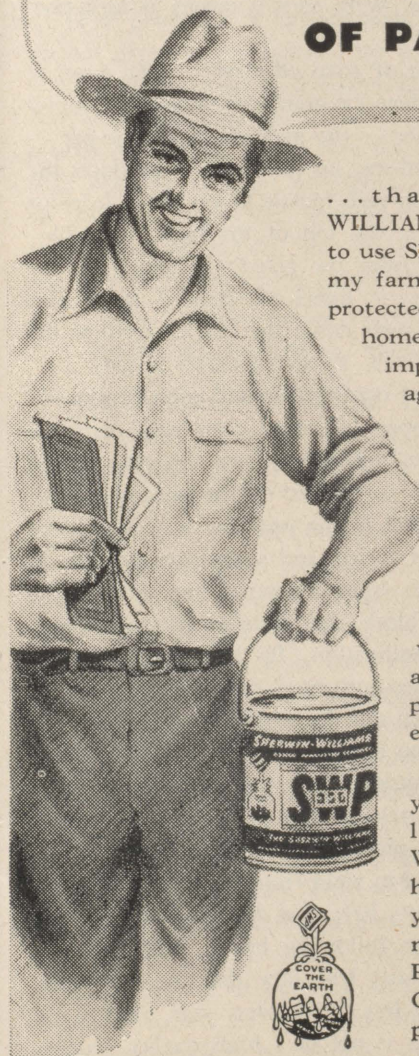
Farm Wages in January

In a bulletin issued on February 20, 1945, the Dominion bureau of statistics reports on average wages paid to help on farms in Canada as at January 15 this year, with comparisons for former years. The average wage paid to male farm help, per month with board, in January this year, for all Canada, was reported at \$54.55. This compares with a wage of \$19.81 reported in January, 1940, and a wage of \$22.65 paid in January, 1943. The increase in wages paid in January this year over those in the same month 1940 has been 170 percent, and the increase over 1943 has been 141 percent.

How should a bull suffering from indigestion be treated?
With great respect.



**FOR PROTECTION
I BUY ALL KINDS
OF INSURANCE
BUT ONLY ONE KIND
OF PAINT!**



...that's SHERWIN-WILLIAMS! I've good reason to use Sherwin-Williams on my farm. For years it has protected and beautified my homestead, barn, sheds, implements and tools, against weather and wear. Because it **lasts** so long, Sherwin-Williams is actually the most economical paint, in the long run. That's why Sherwin-Williams Paints and Varnishes are so popular with farmers everywhere.

Neighbour, it'll pay you, too, to see your local Sherwin-Williams Dealer now: he is still able to meet your paint requirements. Ask to see his Paint & Colour Style Guide before you paint or decorate.

Look for the store that sells

SHERWIN-WILLIAMS
PAINTS - VARNISHES - ENAMELS



Ordinary or Hybrid Varieties of Corn — Which?

by L. C. Raymond

Since a very fair measure of confusion still seems to exist in the minds of the public concerning the nature of the corn varieties we used to grow as compared with the hybrid sorts which are heard so much about today, the editor has suggested that a further statement on this topic would be timely. It is therefore proposed to ask and answer some of the more common questions which arise.

What is an open-pollinated variety of corn? This term — a very long one and not too clear — is used to designate the ordinary varieties of corn we used to grow. Varieties like Leaming, Wis. No. 7, Longfellow, Compton's Early and the like were all open-pollinated sorts.

What does the term open-pollinated mean? Open or cross pollinated means that the pollen or male element of the plant spreads freely over the whole block — carried mainly by the wind. To keep a variety true it must be isolated from any other. With corn it means at least one-half mile.

How is pollination of corn effected? The tassel at the top of the corn plant (a branching structure) represents the pollen producer — the male element. The ear — found usually about mid-way up the stalk — produces the egg or female part. From each female flower there develops a silk which emerges at the top of the husk in a silky, hair-like mass. Pollen from the tassel — carried by the wind almost altogether — lights on each of these silks and the male sperm travels down the silk to fertilize the egg on the ear.

How then is seed of open-pollinated corn produced? To produce seed of open-pollinated corn good ears are chosen from strong, healthy plants from the crop of the year before. The kernels are shelled off the ear and bulked. This seed is then planted in the ordinary way in a block isolated from any other variety and allowed to develop in the natural way. Pollen from any tassel may fall on the silks of any ear in the block, thus insuring the widest possible cross or open pollination. By this mass selection method, seed of an open-pollinated variety can be simply produced year after year and the variety kept substantially true if adequate isolation is provided.

What are the weaknesses of open-pollinated varieties? Open-pollinated varieties have given very fair results, especially for ensilage production. We can probably not expect any great increase in yield from the hybrid varieties. The open-pollinated sorts have one distinct weakness, viz. their tendency to lodge following heavy wind and rain storms. This is particularly true now that the corn borer is found to a greater or less extent every year. Seed of the open-pollinated varieties is not of a high quality, particularly in the matter of germination.

What does the term hybrid mean? A hybrid is the product of a cross between two different strains or varieties, e.g. if pollen is taken from a variety like Leaming and



A wealth of detailed work is involved to inbreed corn for the production of double-cross hybrids. Here pollen from a tassel has been collected in a paper bag and is being applied to the silk of the same plant to self-fertilize it and thus inbreed.

placed on the silks of the variety Longfellow, the resulting seed would produce what is known as a first generation hybrid.

Is there any special virtue in a hybrid? Yes. The terms hybrid and vigor are usually closely associated, but do not necessarily imply the same thing. If the parents are of very different character, e.g. an early and a late, a dent and a flint, tillering and single stock, and so on, then the resulting hybrid will usually be very vigorous, often producing a plant bigger than either parent.

Is the use of hybrids confined to plants entirely? Not by any means. In poultry, sheep, hogs and beef cattle hybrids are common, the regular breeds being crossed to get that extra vigor so characteristic of well-chosen hybrids.

Can this extra vigor of hybrids be retained in later generations? No. The maximum vigor in a hybrid is found only in the first generation following the cross. With corn this means that seed cannot be grown from hybrid seed but it is necessary to secure a fresh stock of first generation seed each year.

Is hybrid corn all made in the same way? No. There are two distinct kinds of hybrid corn; varietal and double-cross hybrids. There is, however, only a limited amount of the former which is used largely in Quebec while the great majority of hybrids are of the double-cross type.

What is a varietal hybrid? A varietal hybrid is simply a cross between two standard open-pollinated varieties. Algonquin is the best known varietal hybrid and is the first generation of a cross between Que. No. 28 and Wis. No. 7. In other words, it is a cross between a small, early, yellow flint and a tall, late, white dent. The result is a high degree of hybrid vigor.

How does the origin of the double-cross hybrid differ from the varietal? This is much too long a story

to deal with in detail here. Briefly it may be said that a minimum of ten years of breeding and intensive selection is required to produce a double cross hybrid. The difficulty with trying to improve an open-pollinated variety is that the breeder has a mixed population, and while the selected plants and ears may look very good they always throw a great variety of poor types in succeeding generations. Double cross hybrids are made up from pure strains made by a long period of inbreeding. These pure strains will continue to reproduce the same thing as long as they are prevented from crossing in just the same way as wheat and oats will. By appropriate crossing — and there are two crosses, thus making the double cross — the vigor is restored and the quality of the new sort is much better than the open-pollinated varieties from which it was derived. Double-cross varieties are thus in effect copyrighted, and so long as the basic strains are kept pure will always give exactly the same thing. The only way to produce commercial seed, however, is to go through the double-cross process each time.

What are the special features of double-cross corn? Double-cross corn is genuine as to variety, i.e. leaving out seasonal differences it will do the same thing year after year. It is much more nearly disease-free. It has great strength and therefore will not lodge under any ordinary circumstance (of particular value in corn-borer regions). The quality of seed is high and it is graded to size.

What grades of hybrid seed are there? There are two on the Canadian market, viz. rounds and flats.

What are the prices and merits of these grades? Rounds sell usually for about \$4.50 per bushel and flats from \$5.50 to \$6.00. The prices asked fairly accurately reflect relative values, i.e. the number of seeds per bushel. It is a little easier to calibrate the seeder for the flats than for the rounds but there is no other essential difference.

What about the proper stand of plants in the field? The same seeding rate applies to both open-pollinated and hybrid varieties, provided germination is the same. The

"For results that pay — feed the PIONEER way"

says Mr. Pioneer



PIONEER
Profit Proven **FEEDS**

237

ultimate stand should be one having the rows 3' apart and the plants within the row 8"-10" apart. The drill or planter should be carefully calibrated each year before planting begins.

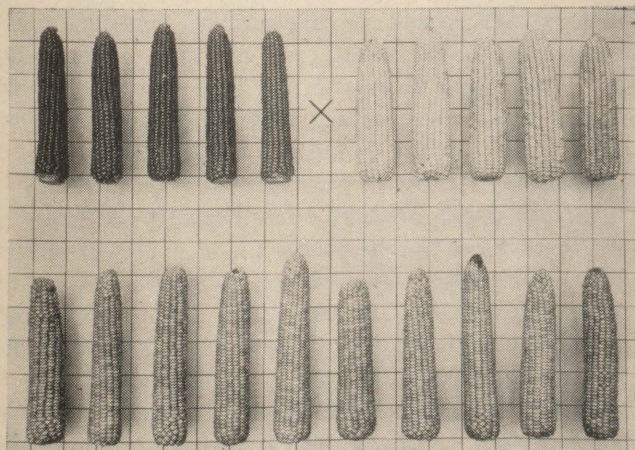
How generally is hybrid corn being used? For the reasons given above hybrid corn is becoming increasingly popular. In the areas on this continent where corn is grown for the ripened grain well over 80% of the crop is today hybrid. Since most of our seed for silage corn comes from such districts, whether we like it or not we will shortly be growing hybrid for ensilage almost exclusively. The genuineness of variety, the quality of the seed and the strength of the crop fully justify its use for silage.

Milk Subsidies Will Continue

The Dominion Government will continue to pay the same subsidies on milk and milk products during the 12 months beginning May 1 as in the period May 1, 1944—April 30, 1945.

The subsidy of 10 cents per pound of butterfat used in the manufacture of creamery butter and of 20 cents per 100 pounds on milk for cheese manufacture will be paid throughout the year. In authorized areas a subsidy of 35 cents per 100 pounds on fluid milk will be paid to producers from May 1, 1945 to September 30, 1945 and 55 cents per 100 pounds from October 1, 1945 to April 30, 1946, except in certain areas where it will continue at 25 cents. For milk used in the manufacture of concentrated milk products and of milk sugar, subsidy will be paid at the rate of 15 cents per 100 pounds from May 1, 1945 to September 30, 1945. This will be raised to the winter level of 30 cents per 100 pounds at October 1, 1945.

Subsidies paid at present and up to April 30 are 10 cents per pound of butterfat used in the manufacture of creamery butter, 20 cents per 100 pounds on milk for cheese manufacture, 55 cents per 100 pounds for fluid milk —except in certain areas where it is 25 cents—and 30 cents per 100 pounds for milk used in the manufacture of concentrated milk products and milk sugar.



The varietal hybrid *Algonquin* is produced by crossing Quebec No. 28 with Wisconsin No. 7. These are shown left to right in the photograph. Below are shown ears of *Algonquin* which are intermediate in type and maturity.

Some Questions on Poultry Raising

Answered by W. A. Maw

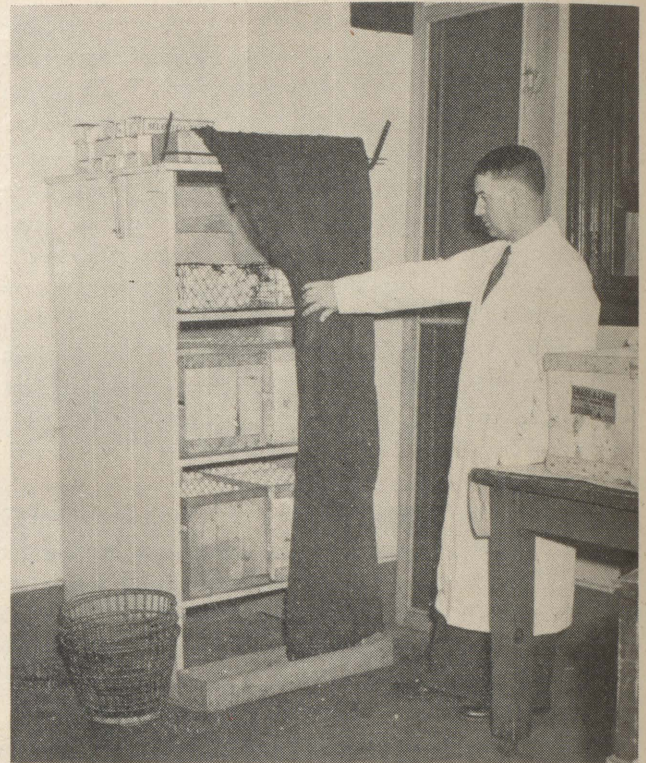
Should I buy mixed chicks? The present demand for poultry meat and eggs is favourable for the coming year. It is therefore advisable to raise cockerel stock for meat to offset the cost of the pullets to be used for fall and winter egg production. The sale of meat stock throughout the growing season offsets the necessary heavy outlay of money to raise pullets alone. Profits may be had from meat production where good stock is carried to a proper finish for quality grading.

What is an egg holding cabinet? A simple cabinet may be made to hold eggs in baskets for cooling and holding in crates for market as well as for hatching purposes. Build the cabinet with closed sides and back, except for 4 inches at the top to allow for air circulation. The top is solid and the front is open. Shelves to accommodate crates or baskets may be slatted in construction; three shelves should be most satisfactory and should be wide enough for 2 crates on each shelf. The front is covered by a burlap curtain, hanging from a water trough located on top at the front edge. The curtain carries the water down to the front to a pan on the floor. Fill with water twice daily.

What simple management practice is advisable to avoid spreading disease on a poultry plant? All contact between young and adult stock should be avoided if at all possible. Where one person attends both adult and young stock it is advisable to have provision for cleaning boots or shoes by wiping on a mat carrying a disinfectant; or remove rubbers before entering the brooder house. The attendant should also wash his hands if handling adult stock before going into the brooder house. Do not move chicks in crates contaminated with droppings from adult stock.

What simple method of disposal of dead stock is recommended to avoid spreading disease? All dead stock, or diseased stock which has been killed, should be disposed of by burning or burying in deep pits properly covered to protect them from predatory animals or birds. Do not bury dead stock in manure piles to be exposed on the land at a later date.

What is factor grading of dressed poultry? Four major factors of condition in dressed poultry which influence the final quality grading of the dressed carcass are: body shape; plumpness of fleshing; distribution of fat; dressing. All factors are essentially dependent upon one another to attain the highest grading of the carcass. A well-proportioned body shape results in plump fleshing which, in turn, will probably be easily fattened. High quality in poultry meat is shown by a good distribution of fat over the entire body: breast, thighs and back. Dressing or manner of killing and removal of feathers should be done well to leave the carcass clean of pin feathers and free of bruises, tears



or discoloration from poor bleeding. If the carcass is de-graded because of any one factor failing to indicate top quality, such as 'A' grade, the carcass falls into a lower grade, such as 'B' quality.

Let's Do A Better Job

Efficiency in poultry production is only possible where all work is organized by a planned program of procedure from month to month. Look ahead and consider the necessary and essential features of all jobs to be done. Aim to improve stock, conditions and practices continually. The present outlook for poultry and egg sales is better than ever before. Let's do a better job by being more efficient — reduce general costs and increase net revenue to the producer.

The 1945 Outlook for Poultry Meat

Never before has the poultry producer been given similar assurance on a price basis for poultry meat before the chicks were hatched. The demand for quality poultry meat is assured and the price to be paid has been agreed upon by the trade in Quebec and Ontario. Every effort should be made to raise all cockerel chicks for meat. The demand is for all stock which will dress two pounds and over. It is advisable, however, to grow as much as possible to the full roaster size and finish by fattening to get a high per cent 'Milkfed A' quality. Quality pays the biggest profits.

Patriotism Plus

by J. E. Lattimer

The expansion of food production in Canada during the war years has been a gratifying surprise to many. In grain, dairy products, poultry products and meat, expansion has been marked. Where Canadian farmers have really gone to town during the period has been in bacon production.

The accomplishment could not have been brought about without a great amount of hard work by the farmers, helped by a better than average run of seasons. For the six war crop years from 1939 to 1944 inclusive the average yield of wheat was 19 bushels per acre. This is about three bushels above the long time average yield. It is a higher average than has been secured in any of the five previous similar periods.

Another factor furnishing firm foundation for future accomplishment was that, at the outbreak of war in 1939, there was a huge carry-over of grain, and at the same time, expansion of pig breeding in process. These were cause and effect, as the difficulty of marketing grain made pig feeding not only profitable but necessary.

The carry-over of grain is still substantial. The average farm price of wheat in Canada for the six war crop years was less than .75 cents per bushel. That a world war could last into its sixth year with the farm price of wheat remaining at that average is a wonderful subject to dwell on. That story will have to wait. Here it is only incidental to the expansion of pig-feeding operations.

The help of the pig had to be enlisted to help get rid of the grain surplus. When grain was unsaleable and pigs both precious and prolific, they furnished a good medium for the turning of the unsaleable surplus into cash. Expansion of pig feeding went on apace, as the following records show:

Inspected Slaughtering	
1938	3,137,203
1939	3,628,362
1940	5,454,930
1941	6,273,851
1942	6,196,860
1943	7,173,550
1944	8,863,178

All sections of the country contributed, more or less, to this expansion. Some sections expanded much more rapidly than others. The greatest change took place in the grain-growing provinces. This was due partly to the surplus of unsaleable grain available in that area. The deficit areas of feed supplies also expanded pig-feeding. This expansion was promoted by the freight assistance policy instituted as a war measure.

Patriotism, advice and exhortation must be credited with some influence in establishing this record. Yet, the huge carry-over of grain at the outbreak of war, the better than average yields of grain of the war years and freight payment to deficit feed areas from public funds, are factors of some influence.

Pig Business Is Big Business

The pig business is big business from whatever angle it is regarded. Britain spent more on importation of pork products than on wheat as far back as in 1931. Of course the comparative expenditure on pork and wheat varies from year to year, according to the price. The expansion of home-grown wheat in Britain, and the reduction of pig-feeding as a war measure make even the reduced quantity of pork product imports now much more valuable than the imports of wheat and flour.

Records of what the pig business has been bringing to the Canadian farmers is also interesting. The records of cash receipts for farm products is reported as follows:

CASH INCOME FROM SALES OF FARM PRODUCTS CANADA

	1942	1943	1944 (6 months only)
	\$	\$	\$
Wheat	145,517,000	201,144,000	164,416,000
Cattle and Calves ..	174,261,000	192,453,000	90,316,000
Dairy Products	227,161,000	248,941,000	128,237,000
Hogs	191,040,000	237,501,000	152,239,000

From this record it would appear that hogs that held second place in both 1942 and 1943 may be in the leading position in 1944. Even if that eventuality should not occur, the record bears eloquent testimony to the persistency of the pig.

Retrospect and Prospect

If the pig fails to lead all farm products in bringing home the bacon (to the farmer) in 1944 there is small chance of him doing it this year. And this, brings us to the present troubles in the hog-house. It is feared by interested parties that too few hogs will be marketed in 1945. It is now certain that there will not be as many hogs marketed in 1945 as in the previous year. Just how great the decrease will be is a matter of estimate, and the estimate may not be too far astray if all factors are taken into account in spite of the unpredictability of the pig which has been mentioned already.

One important factor in estimating future happenings is the *where* and *why* of past performance.

The greatest expansion of pig feeding was in the grain-growing provinces.

Hog Output

	1939	1943
Alberta	979,898	2,392,384
Ontario	1,667,991	2,029,228
Saskatchewan	312,188	1,409,036
Manitoba	327,212	755,144
Quebec	336,575	436,993

These figures show that while in Alberta and Manitoba the number of hogs marketed more than double from 1939 to 1943, in Saskatchewan they were over four times as great, while in Ontario and Quebec the increase was much less marked. The reason why expansion was so rapid in the grain-growing areas was the inability to market the grain as grain.

Now that grain is again saleable (and 1944 is the second year in succession that wheat has been worth over \$1.00 per bushel at the farm) there is not the need for transferring grain into bacon that prevailed for the first four war crop years. Previous experience reveals that if and when wheat brings \$1.00 a bushel or better at the farm — as prevailed from 1924 to 1929 inclusive, on the average — the farmers of Western Canada prefer growing grain for sale to any other activity. During the period from 1924 to 1929 there was a slight reduction in butter production, a falling off in cattle sales and a slight reduction in the number of hogs marketed.

It is also in Western Canada where intentions to decrease feeding are most apparent. The decrease in number of hogs on farms as reported on June 1, 1944, when compared with the previous year, was greatest in the grain-growing provinces, although a decrease of some proportion was recorded in all provinces. The decrease in marketings for the year 1945 will be greatest where the expansion was most rapid. This is the more certain as the freight assistance renders the feed-hog-price ratio more favourable in deficit areas than would otherwise prevail.

Another fear that has been voiced is a falling off in quality. This usually happens in rapid expansion of any product. Home producers are inexperienced. The results are sometimes disappointing and the inexperienced are usually the first to give up the job. The more efficient producers that produce the best quality will be the most likely to maintain production. It has been estimated by some that the total number of hogs marketed in 1945 will be between seven and seven and a half million, or about the same number as in 1943. If that is near the number it will still be double the 1939 total.

One thing that may be said with confidence. Whatever happens will not likely please everybody. For this reason, pigs may continue to remain in the limelight. We may possibly have a chance to refer to them again. Perhaps this is partly due to the pig being a poor co-operator. He is an animal that must be appeased, so to speak. It is much easier to work with him than against him because he is pig-headed.

Farm Loan Bureau is Active

During the year ended December 31, 1944, the Quebec Farm Loan Bureau received 1616 applications for loans and took action upon all but 185, most of which were received too late in the season for the necessary inspection of the farms to be made. During the year 996 loans, to a total value of \$2,313,975.00 were made.

Since the Bureau was set up in 1937, 21,410 farmers have borrowed \$48,146,340.00. The Minister, in releasing this information, stated that he was particularly pleased with the way these obligations were being repaid. Repayments are made punctually and in many cases in advance of the due date.

Cash Incomes From Sale of Farm Products

During 1944, farmers of Canada received a total cash income from the sale of farm products of \$1,752 millions, according to a bulletin issued February 23, by the Dominion Bureau of Statistics. This is the highest level ever reached by this estimate of farm cash receipts made by the bureau. When government payments of various kinds are added, total receipts for 1944 are shown to have been \$1,817 millions.

All provinces reported higher cash receipts than former years except P.E.I. Most notable increases occurred in the west in both grains and livestock.

Cash income for various years is reported by the bureau to have been as follows:

YEAR	Gross Cash Receipts (in millions)	% of the 1926-29 average
Average 1926-29	\$ 970.5	.
1932	\$ 385.5	40%
1939	\$ 722.3	74.4%
1940	\$ 765.8	80%
1941	\$ 914.0	94%
1942	\$1,100.9	113%
1943	\$1,402.1	144%
1944	\$1,751.7	185%

Extreme difficulties in transportation, chiefly rail, in the past two months, has been the main contributing factor to a situation in feed supplies for Eastern Canada that is causing concern. The Canadian Federation of Agriculture has been advised that although the over-all feed supply situation is not too stringent, the acute shortage of railway cars at times, and the difficulties of transportation in a particularly severe winter of heavy snows and low temperatures, have resulted in heavy withdrawals of feed from the emergency feed banks. Rail movement eastward has declined 50 percent, and eastern users of western grains are beginning to feel the pinch. Shortage of cars has also affected the milling industry rather seriously with enforced stoppages in operation, and a consequent reduction in the production of mill feeds. The reserve stocks of feed grains at Sarnia, Toronto, and Montreal, are all being drawn upon, particularly at Sarnia, because of heavy drains by Western Ontario, and the feed bank at Sarnia has been cut in two in recent weeks. Overall supplies of coarse grains, particularly barley, are decreasing rapidly. If farm deliveries of barley in the west equal those of last year and the present rate of feeding continues, farm stocks of barley, states the government report, at July 31 will be well below the 23 million bushels carried over last season.

"Invest In The Best"

Agricultural Engineering Notes

by L. G. Heimpel

Is Your Tractor Ready For The Season?

There are many farms in this province on which there are now tractors which are fairly new; that is, they have been used perhaps for only one or two seasons. Perhaps these machines do not yet need an overhaul, but they should have a careful check-over before they are put to work for another season.

The oil in the gear cases should be renewed according to the instruction book. Front wheel bearing should be repacked with the correct grease, usually short fibre grease. The machine should be carefully gone over with wrenches for loose nuts or studs, as there are almost always some joints which have worked loose. If the tractor is battery equipped it is essential to see that the battery is in good condition. The battery should have been removed for the winter and given the occasional charge to keep it in condition. If this has not been done it may be necessary to buy a new one. Connections between the cables and the battery posts must be clean and tight if the electric system is to function properly. Valve tappet clearances should be checked as well as the condition and setting of the breaker points in the magneto or distributor breaker box. Finally, it is a good idea to clean the fuel tank and the fuel filter; the air filter also should be cleaned and the oil in it renewed. Before going to work the machine should also be given a thorough lubrication job.

It is very important that tractor owners and drivers study the instruction books accompanying their machines so that they become familiar with every part and the service each must be given to keep it functioning properly. Much of the trouble experienced by tractor users can be traced directly to neglect of servicing instructions.

Take Corn Borer Control Regulations Seriously

In order that the corn borer may be kept under control it is essential that the regulations imposed by the government be taken seriously. These, in short, call for the complete destruction of all crop refuse from the previous year's crop or that all stray stalks and stubble be completely and effectively buried under several inches of soil. Occasionally one sees fields of last year's corn land in which the plowing did not do as complete a burying job of corn stubble as should be done and some of the refuse is likely to be brought to the surface in seed bed preparation work this spring.

The kind of implement used in seed bed preparation will have much to do with this. A cultivator should not be used on such fields as the teeth are almost sure to bring corn stubble to the surface. Only the disc harrow should be used to make a seed bed on such fields. It is useless to try to control this pest with methods such as are in use on

some farms, both in regard to the quality of fall plowing and in the implements used in seed bed preparation. Fortunately any corn that is cut into silos will not be a source of worry because ensiling definitely kills the borers, but we have a lot to learn about the proper disposal of corn crop refuse.

Care of Electric Fencer Units

Very soon many electric fencer units will be put back into service. While these machines are well made, they can not always be depended upon to give continuous service, year after year, without some attention. Possibly all the attention that is needed is to clean the contact points. Even if the unit worked all right up to the end of the season last year, it is possible that it was stored in a damp place and some oxide has formed on the points during the winter or there may have been some burning of the points which will prevent proper action this spring. Drawing a piece of very fine sand paper between the points may be enough to clean them up, but pitted points should be dressed with a special stone for the purpose. Garages are usually equipped with these.

Where a fencer unit has stopped operations occasionally last year it is advisable to have it put in shape by the agent from whom it was bought, or it may be advisable to send it back to the factory. These units are accurately made but there is need for adjustment after several seasons of use. However, they should not be undertaken by anyone unless there are available specific instructions as to procedure. It is, of course, important that a battery of the correct voltage and fully charged be available for the unit.

Survey Shows Value of Seed Cleaning

A three-year test made by Richard Cayouette, Botanist of the Weeds Division of the Department shows conclusively the value of proper cleaning of grain to be used for seed.

Quebec has some 600 screening centres, and samples of oats were taken from 20% of them, sent to Quebec and analysed for purity, weed content, etc. It was found that in the majority of cases the grain returned to the farmers from these centres was from 95% to 100% free of seeds of noxious weeds. When the seed was examined before being screened, it was found to contain, on the average, 935 weed seeds in every pound of seed oats: after screening only an average of 15 weed seeds to the pound were found.

Our seed cleaning centres apparently are doing efficient work and the figures above give abundant evidence of the value of using clean grain for seed.



GO-OPERATION AND MARKETING

A page of interest to members of farmers' co-operatives

Learning the Language

"There is one language we can't afford to ignore. It is the language of co-operative financial statements. For we are the owners of the business. As good citizens we expect to run our own business, not leave it to someone else to run for us without any of our supervision. If we can't even understand the business terms our employees must use to explain it to us, what's to prevent them, our hired men, from becoming our bosses?" — Merlin Miller and Glenn Fox in the C.C.A. ten cent pamphlet, "Learning the Language."

"Contrary to the purposes set forth in the articles of incorporation and by-laws of our co-operatives and to the fundamental theory of co-operation, we have persisted in using accounting terms adopted and used by the profit type of corporate business. This erroneous practice is partly due to the reluctance of accountants to forsake terms which they learned in textbooks written for profit business and partly to the fact that many of our co-operatives have so closely adopted the methods used in the profit type of business!" — Co-operative Auditing Service, Minneapolis.

Wrong Terms	Right Terms
Income, Profit, Earnings	Savings, Proceeds
Profit and Loss Statement	Operating Statement
Surplus	General Reserve
Net Worth	Members' Equity
Profit and Loss Account	Operating Clearance Account
Patronage Dividends	Patronage Returns
Dividends on Capital	Interest on Capital
Credit Policy	Cash Policy

The activities of the commission inquiring into co-operatives and income tax have focussed attention on the whole question of co-operative terms. It is unfortunate that co-operatives in their modern forms did not develop a couple of hundred years earlier so that they might have established their own proper terms and practices without borrowing words which had been given particular meaning by usage in the profit corporation. But the co-operative movement is developing to the point where it is clarifying its position as being fundamentally different in purpose and method from the corporation organized for the profit of investors.

So extensive is becoming co-operative activity that we no longer need refer to profit and non-profit business. We would do well to refer to co-operative business and non-co-operative business. We might remind ourselves of the

recent statement from a director of one of Ontario's larger co-operatives that the day will come when the co-operative way will be recognized generally as the best and logical way and non-co-operative corporations will be the exception rather than the rule.

—Leonard Harman in the Rural Co-operator.

Short Courses for Co-Op Presidents and Managers

Several interesting projects on co-operative education for 1945 were set forth by the Secretary of the Coopérative Fédérée at its annual meeting held recently in Montreal.

Mr. Martin emphasized the need to adapt his Service to the Quebec Farming Co-operative movement which is becoming more wide-spread every day. With a total of 393 branches as at December 31, 1944, the time has now come for each local branch to take over the management of its own affairs.

The Educational Service of the Coopérative Fédérée will, from now on, work with groups, as they have only a limited number of field men. In this way, their work will be more useful and effective; the co-operative managers will receive group instruction and will then pass on their knowledge in their respective circles.

It has been proposed for 1945, and until a better way has been found, to organize meetings of managers and presidents of the different branches, said meeting to take place at the Coopérative Fédérée and also in various sections of the Province. Such meetings would be for three-day periods. District meetings would take in about 20 co-operatives at one time.

Thurso Co-Op Boosts Butter Production

Production of butter among members of the Thurso Co-operative Society, Papineau County, for the year ending January 31, 1945, increased by 83,000 pounds over the preceding twelve months for a total production of 431,000 pounds according to a report of the recent annual meeting, sent in by J. W. Delaney, regional agronomist at Hull.

Sales amounting to \$257,000 showed an increase of \$73,000 over the previous year. Current assets amounted to \$23,000 reserves of \$2,500 are shown on the balance sheet with no liabilities.

Some 100 farmers, all shareholders in this Co-operative attended the annual meeting held recently at Thurso.

Annual Meeting of Honey Producers

The Quebec Honey Producers Co-operative held its annual meeting at Montreal on the 1st instant. Founded in 1925, re-organized in 1938, this society now has 182 members.

At the end of its fiscal period, assets were \$23,294.30 with an ordinary capital of \$7,500 and a preferred paid-up capital of \$2,225.

The financial report was given by Henri Lavoie, Inspector Bookkeeper of Agricultural Co-operatives with the Provincial Department of Agriculture. Apiculturists present at the assembly were reminded by Jules R. Methot of Quebec, that beekeeping would have to be co-operatively organised in prevision of the post-war period at which time, in this type of work, as in many others, competition will be so keen as to necessitate the closest grading of all products.

The Board of Directors consists of: Hercule Lavoie, (Laprairie) President; Oswald Paradis, (St-Simon, Bagot) Vice-President; J. A. Beaudoin, (Ste-Madeleine) Secretary; Joseph Rose (St-Urbain); Hector Béland (Louiseville); and Bernardin Laplante (St-Constant, Laprairie).

New District Co-Op for Poultrymen

One hundred and fifty-seven poultry-raisers recently got together and founded a district poultry co-operative at St. Damase St. Hyacinthe which will handle the slaughtering, grading and sale of fowl.

The founding of this society was no more nor less than the transformation of the local poultry syndicate into a regional co-operative.

During the year, the Syndicate received 130,724 dozens of eggs, 56% of which were graded "A" large. These eggs sold at an average price of 33 cents per dozen, poultry-raisers receiving 30½ cents per dozen.

The killing-station received 78,376 pounds of fowl meat. On grade "A" hens, members got 22½ cents and 24 cents per pound; for chickens and cockerels graded "A", 28 cents and 29¾ cents. Fowl slaughtering was done from October 10 to January 20, 1945, on an average of 87 birds per hour. Producers realized a surplus of \$5,000 to \$6,000 on their sales. These figures were so convincing that they induced the members to set up a modernly equipped killing station with proper quarters, machinery and refrigeration facilities.

Horse Meat Co-operative

Construction of a horse meat processing plant at Swift Current is announced by the Saskatchewan Horse Co-operative Marketing Association. An initial contract for 5,000 tons of frozen and pickled horse meat is being arranged for the Belgian government.

Market Comments

It has been recently announced that grain prices at Fort William will be the same for the coming season that have prevailed for the past two years. It has also been recently announced that bonuses and subsidies on dairy products will continue for the coming year as during the past season.

The outstanding change in the live stock markets during the past month was a decline in the price of veal. This occurred with heavier marketings. Runs of all live stock except hogs continue above those of the previous years. This is reflected to some extent in the prices prevailing as compared with the earlier period.

The grass is growing. For March 26th, as this is being written, that is real news. March, which this year came in like a lamb, is preparing to go out with the coming of the dandelions. Today also, the ice breaker is at Montreal East. The mild March promises an early spring. Less feed will be required and the transportation of what is needed will be easier, not to mention the increased ease with which one shovelful of fuel in five will be saved.

Of course it is impossible to have advantages from all angles. The first crop of the year, the maple products, promises to be very light. Yet, it is an old saying that a good sap year is a bad year for grain crops, so why worry. It is also said that the early break-up will keep some wood in the bush that should be elsewhere according to plan. On balance, it would appear that in a country with the usual winters that we have, limiting length from any cause is a decided gain.

Trend of Prices

	Mar. 1944	Feb. 1945	Mar. 1945
	\$	\$	\$
LIVE STOCK:			
Steers, good, per cwt.....	12.35	12.28	12.38
Cows, good, per cwt.....	8.85	8.90	9.05
Cows, common per cwt.....	6.70	6.67	6.98
Canners and cutters, per cwt.....	5.60	5.50	5.55
Veal, good and choice, per cwt.....	15.85	15.80	14.98
Veal, common, per cwt.....	14.15	14.48	13.47
Lambs, good, per cwt.....	—	12.50	—
Lambs, common, per cwt.....	9.42	9.20	8.70
Bacon hogs, dressed B.1, per cwt.....	17.15	17.73	17.83
ANIMAL PRODUCTS:			
Butter, per lb.....	0.35	0.35	0.35
Cheese, per lb.....	0.21	0.21	0.21
Eggs, grade A large per doz.....	0.35½	0.35½	0.35½
Chickens, live, 5 lb. plus per lb.....	0.29¾	0.28½	0.29¾
Chickens, dressed, milk fed A per lb.....	0.36¾	0.36	0.36
FRUITS AND VEGETABLES:			
Apples, B.C. McIntosh, extra fancy, per box.....	—	3.25-3.75	3.25-3.40
Potatoes, Quebec No. 1 per 75 lb. bag.....	1.85-1.90	1.60-1.75	1.70-1.80
FEED:			
Bran, per ton.....	29.00	29.00	29.00

Buy VICTORY BONDS



● Hopes and dreams ... plans for the future! These are things which make life interesting ... inspire our ambition and shape our progress. And so we plan ... and work to make our plans come true ... and life is fuller. Happiness and the satisfaction of achievement reward our labour.

Most of us have plans for the future ... plans we hope to put through when the war ends. To that end we are saving now, for money will be needed for the things we plan to do.

Victory Bonds ... which enable us to serve on the home front by saving our money and lending it to our country ... will provide the money to carry out our plans when the war ends.

So when we buy Victory Bonds ... to help Canada's war effort ... and to achieve the Victory Loan objective in our communities ... the small pleasures we deny ourselves now will be made up to us in generous measure when the money we save will be available for things that will give us permanent satisfaction and comfort.

So ... for a better time to come ... let's keep on working ... saving ... lending ... buying Victory Bonds.



Invest in the best



BUY VICTORY BONDS WITH MONEY YOU HAVE SAVED...
BUY MORE . . . ON CONVENIENT DEFERRED PAYMENTS

Victory Bonds pay 3% interest . . . double bank interest on savings. Buy Victory Bonds with your savings. Farmers can also buy Victory Bonds on convenient deferred payments. Pay 10% or more when you order the bonds and the balance over a period of six months.

To PUT PLANS THROUGH

...WHEN HOPES COME TRUE

NATIONAL WAR FINANCE COMMITTEE



DEPARTMENT OF AGRICULTURE

Activities, Plans and Policies of the Quebec

Department of Agriculture

Provincial Holstein Breeders Meet

The Quebec Holstein Breeders' Association's annual meeting held early last month was the best attended of any in the ten years the association has been existence, with over 300 members present and taking an active part in the proceedings.

The president, Mr. David Roy, was in the chair at the business sessions and in his opening speech gave some interesting figures on the National Association, which now boasts 9,089 members. During 1944, 51,602 head of cattle were registered and 43,173 animals were transferred, so that Holstein registrations represent 68.3% of all registrations in Canada: Holstein sales account for 68% of all sales in Canada. The business turn-over for the year 1944 was \$137,621.40. The Quebec Branch is a member of a strong organization, as these figures show.

Mr. Roy extended official thanks to the authorities of the Provincial Department of Agriculture for their continued help and encouragement, with a special vote of thanks to the members of the agronome service.

Senator Emile Vaillancourt of the *Caisses Populaires* was a speaker at the mid-day luncheon, and in his French talk urged on his listeners the importance of thrift, pointing out the ease with which the savings habit could be taught to children who formed the habit early in life of dealing with savings associations. In his English talk he summarized the brief presented on behalf of the *Caisses Populaires* to the Royal Commission on taxation of co-operatives. Professor Toupin was also a luncheon speaker, and gave a progress report on his studies on the cost of milk production, making particular reference to the fixing of floor prices for dairy products. He pointed out that a fixed price for milk was not necessarily the price that the farmer would eventually receive, taking into consideration his year-round income from this source, and felt that due consideration of this fact should be made when floor prices were being fixed. He did not favour the present policy of two prices for milk, one for summer and one for winter, but felt that, if the two-price system must be maintained, prices should change on June 1st and October 1st. Any price-fixing scheme must be based on averages; the good producer with high-producing cows will be all right: the poor producer will be out of luck.

During the meeting sundry successful breeders were given public recognition by the presentation of Certificates of Superior Production. These went to Wm. Bousquet, La Presentation, B. S. Ingham, Lennoxville, and the Maison

St. Joseph, Sault au Recollet. A Certificate of Longtime Production went to Lucien Blanchette, La Presentation, and a Master Breeder's Shield was presented to Tom Cleland who has charge of the Brown Corporation herd.

The report of Secretary Hermas Lajoie showed that the local clubs had been active during the year and that the Quebec Branch has increased its membership in the ten years of its existence from 725 to 1,167. During 1944, five Black and White days were held; the one at Victoria-ville, where 242 head were exhibited, set a Canadian record.

The chief business transacted at the meeting was the discussion and adoption of certain changes in the constitution of the Association to bring it into line with those of similar organizations forming part of the newly-constituted Quebec Purebred Livestock Breeders' Association. One of the important points of the new constitution is the provision which transfers final authority from the board of directors to the annual meeting.

National Flax Council Organized

Fibre flax has become an important crop in this province and it is vital that every possible means to improve methods of growing and processing it be explored so that our growers can get the most out of their crop.

To this end a National Flax Council has been formed. It includes producers, manufacturers and flax merchants, and will work in close collaboration with representatives of the Federal and Provincial Departments of Agriculture. There are fifteen directors: twelve growers, two representatives of the textile industry and one flax dealer. Eight growers are from Quebec, three are from Ontario and one comes from British Columbia, this distribution being based on the relative place this crop holds in the various provinces.

J. O. Gour, Casselman, Ont. is president: Omer Milot Yamachiche, is vice-president and the secretary-treasurer is J. G. Morazain, Montreal. Directors are Charles Gagne, J. R. Latulippe, Edgar Lalonde, H. Lalonde, G. Lagace, L. Poliquin, J. Poulin, J. P. Cloutier, J. W. Yaxley, E. Dent, J. Anderson, A. S. MacDonald and L. Jenson.

At the first meeting, held in Montreal last month, two committees were set up. The first, a committee on research, has R. J. Hutchison as chairman. The committee on grading and sales has J. W. Mackay as chairman. Both these men are from the Federal Department of Agriculture.

Bright Market Prospects for Fowl Poultrykeepers Requested to Fatten Cockerels

Questioned on the business outlook of the poultry industry for 1945, C.-E. Benoît, Chief of the Poultry Division, forecasts a strong demand for fowl graded A and B during the next few months. Local markets need fowl meat and export contracts will take care of all high grade surpluses. Last year, Canada exported 30 million pounds to the United States and this year, the American Army is calling for 50 million pounds. With the civilian population severely rationed on all other sorts of meats, Canada will be called upon to supply the United States with a minimum of 75 million pounds of fowl. Prospects are highly interesting considering that certain business houses guarantee in advance to producers on milk fed chicken 32c per pound in April and May, 33c in July and August and 30c from September to December, inclusively. Canadian authorities are of the opinion that every pound of fowl will go at the Canadian ceiling price.

Mr. Benoît considers this most encouraging news for poultrymen and he thinks each breeder should purchase not only chickens but also cockerels this spring with a view to fattening them. Many will hesitate to do so owing to the fact that last year fattened fowl was not remunerative. Conditions this year, however, are much better and poultry raisers will find the new poultry stations now being built of great assistance in marketing their products.

Short Courses For Potato Growers Given

The Provincial Department of Agriculture, in collaboration with the Youth Training Plan and the Federal Department of Labour held a two-week short course at Ste. Anne de la Pocatiere during March for potato growers. The purpose of the course was to demonstrate how to grow good potatoes and control disease. There were thirty class hours in the course, half devoted to study periods, discussions, moving pictures, etc. and half the time was used for laboratory work or for demonstrations.

St. Hyacinthe Fair Dates Set

The Regional Exposition at St. Hyacinthe will be held on August 6, 7, 8 and 9 and will be open to the counties of St. Hyacinthe, Vercheres, Chambly, Richelieu, Rouville and Bagot. St. Hyacinthe is one of the few regional fairs that continued to operate during the war years and its survival can be taken as proof of its value as a strictly agricultural exhibition. It has an almost perfectly balanced livestock show, with all breeds of cattle represented and in numbers and quality holds its own with the Provincial Exposition.

The fair grounds have had a lot of work done on them and should be in excellent condition for this year's show.

Agricultural Merit in 1945

The Fifty-fifth Agricultural Merit competition will be held in District No. 1, which comprises all counties on the Island of Montreal and in addition l'Assomption, Terrebonne, Chateauguay, Beauharnois, Soulanges, Laprairie, Vaudeuil, Two Mountains, Argenteuil, Napierville, Huntingdon, Laval, Hochelaga and Jacques Cartier.

June 1st is the last date on which applications for entry into the contest will be accepted, and every application must be supported by a recommendation from the agronomer. Application forms are available from the local agronomer or from Alex. J. Rioux, Secretary of the Order of Agricultural Merit, Quebec, P.Q.

The competition was held in District No. 1 in 1940, when 130 farms were entered. The winner that year was Eusebe Landry of St. Lin in l'Assomption County.

Bee Subsidy

A subsidy of .50c per pound on live bees will be granted again this year by the Wartime Food Corporation, Limited, Ottawa, according to information supplied by J. R. Méthot, Chief of the Beekeeping Division.

Beekeepers purchasing their bees directly from American Suppliers should apply for their own grants, whereas in the case of transactions being made through societies or companies, subsidies will be taken care of by these intermediaries. Beekeepers will, however, supply customs or express receipts as a proof that they have received so many packages of live bees.

All claims must be made within the shortest time possible and special forms (C-204) must be used. These may be obtained from the Division of Apiculture, Department of Agriculture, Quebec.

Weed and Corn Borer Control Measures

The Provincial Plant Protection Bureau has issued its annual appeal to municipal councils to appoint weed inspectors who may also check on the observance of the regulations concerning destruction of corn refuse as a means of controlling corn borer.

It is calculated that, on the average, weeds cause an annual loss of \$100.00 per farm in Quebec, and the losses that could be occasioned by corn borer, if not kept in check, would be infinitely more than this. The municipal inspectors have an important role to play in this effort and the 2000 men who were appointed in 819 municipalities last year contributed in no small measure to the control of these plant and insect pests.

THE CALL FOR BLOOD DONORS IS URGENT

The procedure is quick, simple and painless and competent doctors will examine you first to make sure you are in good condition. After the donation, a cup of hot tea or coffee refreshes.

Recommendations of the Quebec Provincial Fertilizer Board for 1945

It is expected that the tonnage of fertilizers to be manufactured in Canada in 1945 will meet with farmers' normal demand.

Due to a better supply of potassium salts, some prewar formulae which used to be popular in Quebec, and which had been temporarily modified, will reappear on the market. As far as deliveries of potash will be such as foreseen, farmers may therefore depend on obtaining formulae

2-12-6, 2-12-10, 4-8-10 and 5-8-10.

Mixed fertilizers 0-14-7, 3-18-0 and 4-12-6 will remain on the list. The brand 9-5-7 will again be obtainable for orchards, and the manufacturing of 2-16-6 is authorized for use on sugar-beets.

The recommendations made below are made under the authority of the War Measures Act which permits only the sale of registered materials and formulae.

ANALYSIS RECOMMENDED FOR RATES PER ACRE

SUPERPHOSPHATE 20%

(For general use on heavy soils and to equilibrate the fertilizing value of farm manure).

	Cereals on clay soils	250 to 600 lbs.
	Silage corn, Swedes and Mangels, with manure	500 lbs.
	1st and 2nd year meadows	375 lbs.
	Pastures where wild white clover is present	400 to 700 lbs.
0-14-7	CEREALS on loam soils where lodging is likely to occur	250 to 600 lbs.
	PASTURES on loam soils, specially as fall applications	500 to 700 lbs.
	ALFALFA MEADOWS on loam soils	250 to 375 lbs.
	CEREALS on light soils well supplied with nitrogen	250 to 600 lbs.
	PASTURES on light soils, specially as fall applications	500 to 700 lbs.
	ALFALFA MEADOWS on light soils	250 to 375 lbs.
	FIBRE FLAX where lodging is usual	400 to 600 lbs.
2-12-6 or 3-18-0	CEREALS on loam soils	250 to 600 lbs.
	EARLY SWEET CORN on heavy soils with manure	750 lbs.
	SILAGE CORN, SWEDES and MANGELS, on loam and clay soils	400 to 600 lbs.
	PASTURES on heavy soils where wild clover is absent	500 to 600 lbs.
	PERMANENT GRASS MEADOWS on loam and heavy soils as an alternative with 4-12-6	250 to 375 lbs.
	POTATOES on heavy soil after a crop of clover being worked into the soil	800 to 1200 lbs.
	TABLE STOCK SWEDES on heavy soils	400 to 600 lbs.
	TOMATOES on heavy soils	600 to 1000 lbs.
	PEAS and STRING BEANS on heavy soils	300 to 500 lbs.
	RASPBERRIES — with 8 to 10 tons of manure	600 to 700 lbs.
2-12-10	SAME CROPS on light soils as 2-12-6 on loam and clay soils and used in same quantities.	
	ONIONS on mineral soils, with manure	700 to 1000 lbs.
	ONIONS without manure	1000 to 1500 lbs.
	FIBRE FLAX production (general recommendation)	400 to 600 lbs.
	FLUE-CURED TOBACCO (special brand) according to soil fertility	700 to 1500 lbs.
	SUGAR BEETS on light soils, broadcast	300 to 500 lbs.
	SUGAR BEETS on light soils, broadcast If fertilizers placed in contact with the seed	250 lbs. 150 lbs.
4-12-6	CEREALS on poor soils, specially low in nitrogen	250 to 600 lbs.
	PERMANENT DEPLETED GRASS PASTURES	400 to 700 lbs.
	OLD GRASS MEADOWS	250 to 375 lbs.
	CORN, SWEDES and MANGELS, on very poor soils	400 to 600 lbs.

	POTATOES on old muck soils	1000 to 1500 lbs.
	EARLY POTATOES with no manure	1000 to 1500 lbs.
	LATE POTATOES where no manure is available and no clover has preceded—ingly been worked into soil	1000 to 1800 lbs.
	EARLY CABBAGES and CAULIFLOWERS	1000 to 1500 lbs.
	LATE CABBAGES and CAULIFLOWERS	625 lbs.
	ASPARAGUS	1200 lbs.
	ORCHARDS, as an initial application in certain districts of the Province (East of Hemmingford) 1 lb. per each inch of tree diameter.	
4-8-10	EARLY SWEET CORN without manure	800 to 1000 lbs.
	LEEKS on mineral soils	600 to 1000 lbs.
	CORN SILAGE, SWEDES and MANGELS on very poor soils where no manure is available	500 to 800 lbs.
	FIBRE FLAX on soils very low in organic matter. (Special recommendation for lower St-Lawrence dist.) without manure	400 to 500 lbs.
	FIBRE FLAX with a thin coat of well rotted manure	300 lbs.
	STRAWBERRIES — after harvest	600 to 800 lbs.
	RASPBERRIES — when no manure is available	600 to 800 lbs.

2-8-16	MUCK SOIL CROPS:	
	CARROTS, BEETS, PARSNIPS	625 to 1000 lbs.
	ONIONS	1000 to 1500 lbs.
	LEEKS, POTATOES	1250 to 1800 lbs.
	CELERY—immediate market use	1000 to 1500 lbs.
	CELERY—keeping celery	2000 lbs. or more

2-16-6	SUGAR BEETS on loam and clay soils: applied broadcast	400 to 625 lbs.
	in band application	300 lbs.
	if fertilizer placed in contact with the seed	200 lbs.

5-8-10	CIGAR TOBACCO	1000 to 1200 lbs.
	PIPE and CIGAR TOBACCO, small varieties	750 to 1000 lbs.
	PIPE and CIGAR TOBACCO, large varieties	1000 to 1200 lbs.

9-5-7 ORCHARDS, 1 lb. per each inch of tree diameter.

N.B.—The rates of fertilizers recommended above refer to the acre as the unit of surface measure. When the "arpent" is the unit of surface measure, the rates of application may be reduced by $\frac{1}{6}$. Example: 1000 lbs. of 4-8-10 per acre equal 800 lbs. per "arpent".

For more information please address correspondence to Mr. Roland Lespérance, Secretary of the Provincial Fertilizer Board, Department of Agriculture, Quebec.

Strippings

by Gordon W. Geddes

The opening of an abattoir by the Hovey Packing Co. at Sherbrooke has given local farmers a new outlet for hogs. It should be a good one as shipping charges are lower, below 60c per head for those shipping with the farmers' club from our section. Grading is official and bonuses are received along with the Montreal price. Some drovers are trying to throw mud because it interferes with their business and say we have to take a chance on the judgment of one grader. But we don't believe there is any consultation of graders in Montreal at the rate they grade them. Anyway, the Club is moving a lot of hogs, even making extra shipments in order to handle them.

Speaking of hog-grading, local farmers also got a chance to see what it means at a government demonstration at Coaticook. The Federal and Provincial Department of Agriculture got together a party of speakers to explain why we needed good grades, what they were and how to get them. As a result quite a lot of farmers have a better idea on the subject. Perhaps the most interesting single item on the programme was a chart showing the grading of hogs from Stanstead county last year.

In the A class went 38.8% of the 19,542 hogs graded while 45.5% went into the B1 grade. This seems like a good proportion in the two top grades yet farmers lost \$34,759.50 by not having them all in the A grade. B-1's are not good enough for the export market and, of course, are not as popular in the home market as one could easily see by looking at the sides exhibited at the meeting. The simplest way of putting more hogs in the A grade is by watching the weight more closely. In hogs of proper weight, 54% graded A. Coaticook Co-operative gets better grades than the County average because they pick out the heavy hogs at shipping point and dispose of them locally. But for the farmer to get full benefit, the hogs must be shipped before they are too heavy. For the small producer, it is not so much the trouble of weighing as the expense of making several shipments of a single litter which contributes to off-weight hogs. Anyway, more attention to proper feeding, breeding and weight is what will hold the British market after the war.

To my mind that is only part of the answer. Merely beating other countries out of the British market is not enough. We must look for the way to increase world trade and world income in order to insure our own prosperity. Someone rightly said 'If goods do not cross boundaries, armies will'. And we must stop our class warfare at home between our organized pressure groups before we can ever stop wars between nations.

The change in sugar rationing should mean some simplification and a fairer distribution of available sweets. There will be one less set of coupons to bother with and those who would like a little more maple produce instead of other varieties will get a fairer chance at it. No doubt Farm Forums can take some credit for the change. Now if the weather would change so there would be some maple products to ration! Quite a few farmers seem to be making plans not to sugar or to do less of it, ourselves included. Last year our help quit when the buckets were scat-

tered, this year they weren't scattered so we put out less.

When we went to the last Film Board showing we found a new projectionist as Robert Taylor had gone to a new job with the Farm Forums. Good luck to him and we hope his new work will bring him our way still.

Scientists in the Bacteriology Department of Macdonald College, have examined 800 different molds for the production of substances which, like penicillin, destroy disease germs. Over 50 active molds have been found which can destroy the type of germs which resist penicillin. It is not yet known how many of these can be used in the human body.

Vitamin H is so active that one-hundredth of an ounce is sufficient for a life-time.

A Washington study shows that the removal of half the trees from a crowded orchard results in financial gain after the first three years.



STEELE, BRIGGS SEED CO.
LIMITED

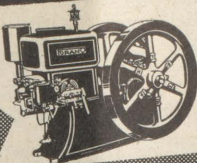
TORONTO • WINNIPEG
REGINA • EDMONTON

SOLD BY LEADING MERCHANTS

FORANO

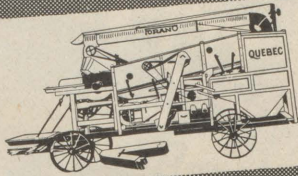
The stationary Gasoline Engine is gradually regaining the confidence of the farmers because time has proved that slow speed stationary engines last a lifetime without trouble. The Forano is an old timer still on the job.

MOTOR



THRESHER

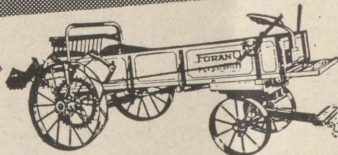
The Forano-Quebec Thresher is a well known machine, long appreciated for its simplicity, performance and low price; characterized by a patented screen made in two inversely operating parts—the only machine of its kind.



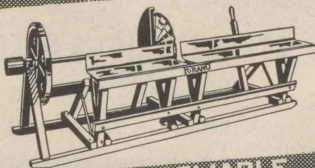
FARM

The Forano light weight and light draft Manure Spreader, with a capacity of 40 to 45 bushels, has a wide reputation for its performance with two medium weight horses. Maintenance cost is very low with a Forano Spreader.

SPREADER



SPECIALTIES



CORDWOOD SAW FRAME

Buy a Forano Cordwood Saw Frame. It is simple—heavy—well made and will last a lifetime.

ARE RELIABLE

The Forano All-Steel Thresher is our pride. Customers like it for three reasons: Firstly, for its particularly good performance, quality and quantity; secondly, because it is a well built machine; thirdly, because it has a good appearance.

THRESHER



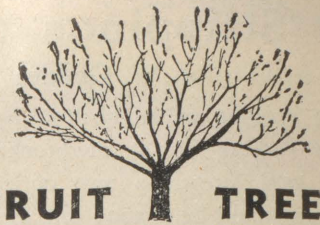
ROOT CUTTER



Forano Root Cutter can be driven by hand or motor. It is roller bearing mounted, rendering it easy to operate.

FREE CATALOGUE ON REQUEST

THE PLESSISVILLE FOUNDRY
PLESSISVILLE P.Q. CANADA
Makers of FORANO Products since 1873

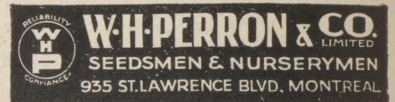


FRUIT TREES

Complete assortment of No. 1 early Summer, Summer, early Fall, late Fall and Winter varieties of Apple Trees, also Currant Bushes (black, red and white), Grape Vines, Blueberries, Raspberries and Strawberries.

Price List on request

28 Telephone *Lancaster 4191



Some Plants Cause Hay Fever in Sheep

Folks who suffer from hay fever, or are allergic to plants, will be interested to know that sheep suffer in a similar way from sensitivity to certain weeds or plants. It usually affects lambs grazed on pastures or oat stubble—and causes a disease known as "big head." The ears swell, become greatly thickened and show a glossy or glazed surface. The eyelids swell and exude a watery discharge. Many lambs affected with big head refuse to eat, develop secondary infection from fly damage and die. Whenever symptoms like these are noted—and lambs on pasture should be inspected daily during the summer months—the affected animals should be confined to a cool, dark stable, and specialized help should be called promptly to prevent serious damage to the flock.

"Parity prices are well worthwhile. . . But for perhaps one-half of the farm families in the United States the real need is for something more for some assurance of more varied food, better medical care, adequate education, and some funds which can be freely used. A minimum standard of living for farm families should be worked out."

—Oris V. Wells,
Bureau of Agricultural
Economics.

"SECURITY"

**RIBBED
METAL**

ROOFING

**PROTECTS AGAINST
FIRE - LIGHTNING - WEATHER**

"Security" Ribbed Metal Roofing is now released for urgent repairs and replacement of Farm Produce Buildings destroyed by fire or storm.

Easy to apply; weather tight; no upkeep costs.



GEO. W. REED & CO. LIMITED
SINCE 1852
4107 RICHELIEU STREET, MONTREAL

Pithy Pickings

by F. S. Thatcher

Among the weapons we can employ to achieve sane reconstruction in the world, I would give top priority to Education—Hon. Malcolm Macdonald, British High Commissioner.

We stand in need of even more scientific knowledge and more efficient economics housekeeping.—P. L. Yates.

"Not long after the war we may be faced with another paradoxical situation of poverty in the midst of plenty. . . . Should not the nations explore the possibility of an international scheme for transferring food at low prices or on lend-lease terms from countries which can most easily produce it to those which most need to consume it?"

—P. L. Yates.

We are moving away from a criterion of purchasing power to a criterion of human needs.—P. L. Yates.

In the U.S.A. one farm family feeds itself and four urban families. In India and China one farm family feeds itself and half an urban family, both at a miserably low standard.

The thyroid-gland hormone considerably stimulates milk and egg production. A method of producing this hormone inexpensively will make it possible to use the substance in agriculture.

The possibility of preventing teeth decay by use of a certain ingredient of protein, tryptophane, is established by recent experiments. High protein diets tend to lessen tooth decay.

Babies born with syphilis can be restored to health by penicillin.

The forebears of all domestic pigs came from Asia.

Starch, the important food originally known only in plants, has been made synthetically in a British laboratory.

A new process for much more rapid breeding of new tree-fruit varieties has been developed by treating the baby plants removed from inside seeds with the drug, colchicine.



**"This hired-man
can do
most
everything!"**



There's a lot more than high quality tractor fuel in that familiar Imperial Oil drum . . . there's the ability to get almost any kind of farm work done in record time, with fewer men on the job. That's why Canadian farmers who own labour-saving power machinery look on Imperial Fuels and Lubricants as the equivalent of an extra, versatile "hired man".

Keep your equipment at top efficiency by using only the correct grades of Imperial Oil Fuels and Lubricants—brought to your door by your friendly Imperial Oil Agent. And place your order NOW . . . so that you may have the correct grades and quantities on hand when you need them.

4512CE



IMPERIAL OIL LIMITED

Esso Extra—3-Star Gasoline—Acto Gasoline—
—Diesel Fuel—Royalite Kerosene—Marvelube
Motor Oils—Gear Oils and Greases—Imperial
Essolube HD Motor Oil.



THE WOMEN'S INSTITUTES SECTION

*Devoted to the activities of the Quebec Institutes
and to matters of interest to them*

Food Habits and Education

by M. S. McCready

When the director of a travelling library circuit is requested not to send the books on nutrition to certain districts because, "the local women don't need them and they are all good cooks", either the books must be inappropriate or there is an incurious group of readers. Nutrition may mean the bodily condition (nutritional status) or the supplying of nourishment and who should be more interested in this problem, by either definition, than women or parents. Why do we not find them seeking more information about such a vital subject; for ways and means of supplying adequate nutrition to all Canadians just as they would inquire as to how adequate housing could be financed?

Perhaps the books and pamphlets supplied have stressed too much one's personal responsibility for one's health through good eating habits, etc., and people cannot accept that responsibility for a variety of reasons. There are, for instance, widespread mistaken ideas about correct diet, difficult supply and storage conditions, low income levels, difficult meal-times, working and housing conditions. Undoubtedly, people need a better world to live in before they can accept full responsibility for their health. Meanwhile, we shall have to strive to make available generally, better sanitary conditions of living, better and more accessible clinics for preventive procedures and for treatment of disease. At the same time more convincing education in regard to good food habits must be provided. Until many more people are impressed with the great importance to health of an assured, regular, adequate food supply to all, we can scarcely expect any public pressure for a national food policy to this end.

It would seem that there is a growing demand for a start to be made in the planning and building of adequate homes for all regardless of the occupants' ability to pay the full costs. It is obvious that the outlay required to obtain or rent a good home and site is beyond many pocket-books but that the advantages to health and good living demand attention to and action on the problem. It is apparently, not equally obvious that the regular provision of a good diet is a practical impossibility for a large proportion of Canadian families. The matter does not seem so urgent since no excessive outlay is required at any one time to

satisfy the need. We do not stop to calculate what cost is involved in supplying a minimum adequate diet weekly for a family. Using the adequate food allowance list prepared by the Toronto Welfare Council 1944, and applying it to a family of five (say, 2 adults, 2 boys 6 and 10 years, a girl 13 years) we find that in this district, at present prices for food, (end of March), it would cost \$12.00 per week (without cod liver oil) to feed them. At the lowest reckoning to provide living at a level for health and self-respect (no frills, no telephone, no car, no higher education advantages) this food budget would be 35½ per cent of the weekly wage; that is, the weekly wage would need to be \$33.80 and the yearly income \$1758. The farm family may not see that such facts affect its well-being but actually the wage earner's ability to eat well is of great concern to the rural population.

Low Incomes Prevent Good Diet

In the light of the wage levels across the country, it becomes apparent that help is needed to assure even an approach to adequate feeding for many. With fixed charges in the family budget such as rent, heat, light and water, etc., the items such as food, clothing, dental and medical care have to be manipulated with extreme care to fit the remaining budget, unless several free services make the situation less stringent. Many families, urban and rural, have learned through necessity to eat a less-than-desirable diet. They do not quickly change this food pattern even though economic conditions should change suddenly. Nor do families in the higher income brackets always choose food wisely. However, from surveys of various groups on this continent, in England and elsewhere, it is shown that there is in general, a steady improvement in food habits as the income rises, there is an increased life span, improved maternal and infant mortality rates and the incidence of sickness is lower.

Granted that good food plays a large part in building and maintaining health where should we start to make its regular consumption more possible? We might start by considering the most vulnerable groups in our population, the infant under five and the expectant and the nursing

mother. As in Britain during this war period, these groups might be guaranteed daily a pint of milk, cod liver oil and a source of vitamin C. These priorities in addition to intensive teaching of the other necessities in an adequate diet, would go a long way towards raising the level of health. Already one Canadian city has such a provision through its health clinic services. Possibly next in order, the school child and adolescent should be guaranteed similar foods through the school or any other appropriate centre of distribution. All of these essential foods would be paid for where possible. Certainly the family allowance scheme should enable many more families to provide these essentials, as has been shown to be the case in a survey undertaken by one large industry providing family allowances in England. The production of many farm products would have to be greatly increased to meet the new demand, to the very great advantage of the farm home. George Bernard Shaw, after outlining the variety of services which are supplied in a modern community, comments, "If bread and milk and utility clothing were communized to-morrow, as they might quite wisely be, it would be only an extension of our existing practice".

Foods Teaching Needed in Schools

We shall scarcely come to considering the provision of certain essential foods to our people until many more Canadians become aware of the problem through its discussion in our schools. Foods teaching need not be attempted only in the health and home economics classes but could be handled variously as a nutrition unit within the social science, civics, hygiene, agriculture and nature study classes so that boys and girls alike would be impressed with its importance. We might come to understand that assuring certain foods was as vital a need as putting the necessary schooling and culture within the reach of everyone. In addition to having interesting food study units incorporated in the school curriculum, similar devices in adult education will have to be used on the woman in her home to make her feel the great importance of her craft of selecting, preparing and cooking (or not cooking) food for her family. As she sees more of us are interested in her job, the more so she becomes by reflection. She will learn that the time-consuming job of shaping a family's food habits by good food preparation and tactful handling of problems is well worth the struggle. Our habits or responses to the basic bodily appetites (of which hunger is one) are fundamental to habits of thought and action later in life. At present it looks as though we have to be prepared to rescue more and more from a variety of ill-health which besets them — a rather negative programme of promoting public health. As we have better food habits however, we will have better people, physically and mentally, and gradually we should come to the place where we could expect people to be responsible for their health.

The World We Want

by Grace A. Kuhring

Most of us have a very clear idea of what we want in our world after the war.

We want a world where we shall be free to work usefully and creatively through the productive years of our lives; Where we shall receive fair pay, adequate to command the necessities and amenities of life and provide food, shelter, clothing and medical care.

We want the right to come and go, to speak, to be silent, to be free from the spyings of secret political police.

Freedom of press and freedom to worship in the church of our faith, which we have taken too much for granted in the past, are perhaps dearer to our hearts now than ever before.

Equal opportunity of education for all children, equality before the law for all citizens with equal access to justice. The right to live in a free system, free from compulsory labour, irresponsible private power, arbitrary public authority and unregulated monopolies . . . freedom from fear of old age, want, dependency, sickness and unemployment.

Summed up it is a world where everyone has his full share of well being.

What we seem to lack is an understanding of how to go about achieving our desire, which is Democracy.

The greatest enemy of democracy is war. Democracy has got to overcome war, or in the end war will overcome democracy. Democracy-government by the people collectively by elected representatives, has stood for freedom.

No one who has lived through this war, can fail to realize that the longer the war goes on, the more it inevitably encroaches upon individual liberty and freedom. The state takes up more and more of one's time, energy and money.

To freedom-loving democrats in Canada, this alienation of our freedom is perhaps one of the greatest hardships that we have to bear. So we long for peace and for the cessation of these controls.

Many people do not realize that we are accepting, not without a murmur, to be sure but certainly without the opposition which well-informed citizens should express, legislation which will make it impossible, not only for taxes to be reduced in the post war period, but, which is apt to make for such an increase in taxation, that our war taxes will seem to have been low indeed.

To a country, not already faced with the tremendous debt which Canada has now accumulated, this legislation might have been possible of achievement.

Every thinking citizen knows that taxes cannot be immediately reduced at the close of hostilities, nor for a long time after the close, in all probability, but he knows

equally well that the tax burden should not be unnecessarily increased.

Democracy carries with it responsibility for every citizen and the early post-war period will be a demanding one.

Lasting peace means more than just the cessation of formal hostilities and lasting peace is the desire of most of the peoples of the world today.

Actually man knows nothing about the making of permanent peace. It has always been felt, that with certain periods of so called peace between, war was inevitable.

So we shall be not merely peace-making, but peace building. Peace will have to be built slowly and carefully. It will be a long and difficult process, and must be, if it is to succeed.

The first logical step in peace building, will be the setting up of the machinery for The United Nations. At this time, all eyes are anxiously turned to San Francisco, for the outcome of the Conference there will determine our chances of building a peace that can endure. Unless the United Nations can continue to work together effectively in setting up a system of International Law and Order, and a means of implementing these laws and punishing offenders, there will be no future means of avoiding war.

Q.W.I. Notes

Argenteuil County. Frontier Branch had an address on the Soya bean and its uses by Mr. Alex Bothwell, Agronomist. Jerusalem-Bethany Branch decided to enroll in the Blue Cross Hospitalization Plan. Lakefield made plans for the coming year, and Lachute had a talk on National and International Relations, specializing on the Soviet Republic, by Mrs. A. Taylor. Morin Heights voted money for a sports equipment for the local school and staged an apron parade and exchange. The branch at Pioneer held a cooking contest, concluding with a public bean-supper. Readings on health subjects formed a part of the programme. Upper Lachute held a food-sale to augment the treasury funds.

Compton County. Sawyerville Branch undertook to support the Blue Cross Plan. A parent-teacher organization was fostered by co-operation between the Branch and the Adult Education movement. A prize for perfect attendance for the year was presented to Mrs. Stainthorpe. Cookshire Branch discussed the benefits of Health Units and Health Insurance schemes. A programme on Canadian Industries was carried out in this Branch.

Gaspe County. Storms and sickness handicapped the Institutes in their work in this far-away County, nevertheless they carried on with much success. At Sandy Beach, the President, Mrs. Gerald Miller, opened her home to the meeting, and also gave an inspiring address on "Keeping up-to-date in Institute work." This Branch sponsored

a Children's Fair with success which encouraged larger plans for this year. Interesting group discussions on child training, child allowances and health took place. Haldimand Branch had as roll call names of favorite radio announcers. L'Anse Aux Cousins Branch held a social, netting \$13.00 for the treasury.

Chateauguay-Huntingdon Counties. Aubrey-Riverfield Branch sent a sunshine basket to a convalescent, routine business occupied the time of the meeting. Dundee Branch summarized the year's publicity in the annual report. A paper on The Holy Land was given by Mrs. C. R. Grant and a quiz on national relations was conducted by Mrs. John Fleming. Franklin Centre meeting was occupied with annual business and reports. In Hemmingford Branch an inspiring address was given by Mrs. O. F. Orr, on the clauses of the Mary Stewart Collect. Howick supports a bed in the local hospital for use of needy patients. Huntingdon Branch donated \$100. to hospital needs. Two members were presented with life memberships by this branch, Mrs. Lafromboise and Mrs. Effie Houghton.

Gatineau County. The Queen's Message was read in Eardley meeting. Wakefield Branch followed the usual routine of annual meetings.

Megantic County. Lemesurier Branch worked on a quilt for a sale at the meeting. A sunshine box was sent to a member in hospital.

Mississquoi County. St. Armand Branch held its annual meeting and accepted the programme prepared for the coming year.

Papineau County. Lochaber Branch had a Valentine's Day programme, with suitable readings.

Pontiac County. Beech Grove Branch held a cooking contest, and Bristol Busy Bees planned a sliding party for the school children, followed by a supper. The sick were called on by the members of this group. Clarendon planned a thrift sale for the next meeting. Home-made Valentines were on display. Elmside Branch raised nearly \$35. from various sources during the month. First Aid on the farm was discussed, also some household hints given. Stark's Corners suffered in attendance owing to storms, but carried on during the winter months, not only financially but in enrolling new members. Contests planned by the President helped to keep the interest alive. Wyman Branch planned exhibits for this year's Fair. A discussion and quiz helped to enliven the meeting.

Richmond County. Cleveland Branch held a social evening and Denison's Mills sent a sunshine basket to an aged neighbour. Melbourne Ridge held its annual meeting, and Richmond sent fruit and flowers to a lady on her one hundred and second birthday. A "shower" of Valentine Day cards was sent to another elderly lady. A donation of \$3. was given to the Richmond Library. Spooner Pond made a presentation to its retiring president. A discussion on the condition of the Indians of the Province of Quebec

was held, and a resolution sent to the County concerning this matter. Expressions of sympathy were sent to a bereaved family from Windsor Branch. A quiz programme was enjoyed.

Rouville County. Sixteen members of Abbotsford Branch have joined the Blue Cross Hospitalization Plan. Routine business of the annual meeting was carried on.

Sherbrooke County. Ascot Branch donated \$5. to the appeal for the blind. An address by Miss Agnes Smart, Principal of Ascot Consolidated School, was enjoyed, the topic being "The School and Its Aims." Brompton Road sent \$2. to the fund for the blind, and sent books and flowers to a shut-in. Plans were made for an Easter dinner for the teacher and pupils of the local school. The Branch assisted in providing hot lunches for this school. Brompton Road contributed \$2. to the fund for the blind, and held a community bean supper. Thirteen members of Lennoxville Branch joined the Blue Cross Plan and received certificates. The Branch celebrated its thirtieth anniversary at the March meeting. Milby held a recipe questionnaire at the meeting. Orford Branch donated \$5. to the Sherbrooke Y.W.C.A. and held a sale for funds. This Branch decided to accept the Blue Cross Plan.

Stanstead County. Minton Branch remembered a member in hospital with flowers, and sent fruit and food to sick ones. A wedding anniversary was remembered with gifts. In Stanstead North Mrs. F. Abbott was presented with a gift in recognition of her perfect attendance at meetings, Mrs. Curtis Brown making the presentation. Tomifobia made plans and appointed committees for the annual meeting. Way's Mills Branch heard the message of Queen Elizabeth to Women's Institutes read at the meeting. Nearly all Branches in this County report new members.

Gaspe County. York Branch held its annual meeting at the home of Mrs. Berton Eden; twenty-four members answered the roll call.

Stanstead Co. Active in Welfare and Health

by Frances E. Taylor

Medical inspection in the schools and the promoting of diphtheria clinics have always been a feature of welfare work in this county. The past season two very successful clinics were held. At Way's Mills 101 children, English and French, were immunized at a cost of 50c per child. Three registered nurses, all volunteer workers, assisted a local doctor and W.I. members looked after the registrations, checked names and collected fees.

At Beebe 100 children of both nationalities attended at a cost per child of 35c. Here again the staff consisted of volunteer workers, four registered nurses to assist the doctor and two members to attend to the clerical work.

In both cases, to quote the words of one of the organizers, "The kids were grand and the parents most appreciative."

Gaspe

by M. F. Miller

The Gaspe known to the tourist of pre-war days is actually the Gaspe Peninsula, consisting of four Counties, Matane, Gaspe, Bonaventure and Matapedia, and encircled by Highway No. 6 (The Perron Boulevard). The County of Gaspe itself extends from Cap Chat on the St. Lawrence Shore to Newport on the Baie des Chaleurs. The Gaspe is to the minds of many of our Canadians, as is the whole of Canada to many Americans, a land of cold and snow, French and Indians, fishing hamlets and spinning wheels and out-door ovens.

This, in fact, is no more true of Gaspe than of any other part of the Dominion. Indeed, this winter we have enjoyed fewer storms and much milder weather than anywhere between Quebec and Winnipeg. Fishing, lumbering and some farming are the main means of livelihood. Though, farming, as it is known in the Eastern Townships or Ontario, is not carried on here, due to land formations, seasons and distance from markets. The County of Bonaventure on the Baie des Chaleurs has much better farming communities.

Some of the settlements (the entire Peninsula is only settled inland from the Coast for the distance of a few miles; all the interior being uninhabited forest) are entirely French, others English, who cannot understand any French. Along the St. Lawrence from Cap Chat to Gaspe Bay it is all French, with a few scattered English families, but no Protestant schools or churches. From Shiphead (Cape Gaspe) to Newport there are many English speaking communities, with some French; Anglican churches, with an occasional United Church, and Protestant schools.

It was in Gaspe that Jacques Cartier landed in Canada, and there are many claims to the place where he planted the Cross which claimed the land for the King of France, but it was officially placed in the village of Gaspe. During the celebration in 1934, the cross made from the stone of St. Malo, France, was brought out and placed overlooking the inner Basin.

We have, as yet, four Branches of the W.I., organized by Mrs. Cameron Dow in 1939, with a membership of 74. These are all around the head of Gaspe Bay on the rivers, Dartmouth, York and St. John, and are only a few miles apart as the crow flies, but owing to the winding of the rivers and land, to drive from L'Anse Aux Cousins to Haldimand, calling at York and Sandy Beach, you cover between twenty-five and thirty miles, and driving is the only means of transportation between these points.

Numbers of Gaspe girls have attended the School for Teachers at Macdonald College and have been well known throughout the Eastern Townships, where many married and remained. The nursing profession also claimed many of them, and they served overseas, in 1914-18 and again in this war, with both the Canadian and American Hospi-

tal units. Some of the better known men of the Coast (including Bonaventure) have been the late Hon. John Hall Kelly, M.L.A., Grattan O'Leary, Dr. Lorne Montgomery, Dr. J. J. Macpherson, the Rev. Canon Almond, Rev. Harold Laws and others.

The number of names of young men who laid down their lives in 1914-18, inscribed on the Memorial Monument, testify to the zeal with which they rallied to the colors. Now their sons and many more are over there. We already have with us the wives and children of some of our boys, English and Scotch girls they met over there. Already different young men from our coast have been decorated and mentioned in despatches. One would think, the young men of coastal communities would join the navy, but, with few exceptions, they joined the Army or the Air Force.

The scenery is beautiful. Hills, and hills and more hills, winding roads over wooden bridges and through woods that in Autumn are one gorgeous splash of color, and nearly always the sea either near, or in the distance, sometimes blue, sometimes grey with white topped waves with the seabirds, whirling and screaming and diving over them.

SOIL ANALYSIS . . . (Continued from page 4)

of the soil acidity and it indicates, first of all, whether or not the soil needs liming. The smaller the pH number the greater the need for lime. For most farm crops, except potatoes, a pH less than 6.0 to 6.5 indicates that liming is desirable, if the pH is 5.5 or less, that liming is necessary. In addition, a pH of less than 6 almost always indicates that the soil is low in available phosphate, and often that it is low in available potash as well. It is important to note, however, that liming increases the availability of the phosphate in the soil and lessens the need for phosphate fertilizer. It may have a similar effect on the availability of the potash in the soil. At the same time, liming, by improving conditions for plant growth, increase the demand upon the supplies of phosphate and of potash in the soil, and fertilization with these plant foods may still be profitable.

The next most important item in the soil analysis report is the estimate of the organic matter or humus content. The humus is the storehouse of the soil nitrogen, and if the amount of humus is low it is a danger signal respecting the nitrogen supply. The pH number should be considered in connection with the humus content also, for a low pH generally means that the nitrogen of the soil organic matter will be poorly available. The availability of the soil nitrogen, like that of the soil phosphate, will be improved by liming.

The last stage in the usefulness of the soil analysis arrives with the observation of the results of the recommended treatments. If a part of the field is left untreated the effects of the lime or fertilizer (or both) which have been applied will be easier to observe and to judge. The

surest indication of the reliability of the recommendations made in the soil test report is found in the appearance, and finally the yield, of the crop itself.

It is now possible to answer the question, How can I use a soil analysis? The answer is, by studying carefully past practice and performance, by learning as much as possible of the meaning of the soil test report, and by observing carefully the results obtained when the recommendations of the report have been put into effect. In a word, the use which I can make of a soil analysis depends largely on myself.

Family Allowances

Question:—How much will each child receive?

Answer:—Children under 6 years of age.....\$5 a month
Children from 6 to 9 years of age.....\$6 a month
Children from 10 to 12 years of age \$7 a month
Children from 13 to 15 years of age..\$8 a month

In families of more than 4 children, there will be a reduction of \$1 a month for the fifth child, \$2 for the sixth and seventh child and \$3 for each additional child. In other words, the four oldest children under 16 receive the regular allowance, and additional younger children on a reduced scale.

Examples:

1. TWO children aged 7 and 5 would get
\$6 plus \$5\$11 per month
2. FOUR children aged 13, 9, 6 and 2
would get \$8, \$6, \$6 and \$5.....\$25 per month
3. EIGHT children aged 15, 14, 11, 10, 8,
4, 3, 1 would get 58, \$8, \$7, \$7, \$5,
\$3, \$3, \$2\$43 per month

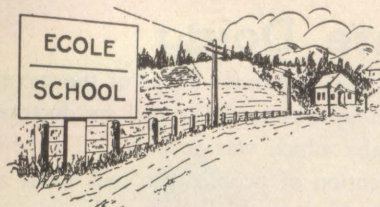
Blueberries in Strong Demand

The blueberry is an important crop in some sections of this province, particularly in the Lake St. John and Chicoutimi districts which produce about 60% of the total Quebec crop. Blueberries are in great demand, especially on the American market, and the Department has given particular attention to improving the quality of the local berries by bringing to the attention of pickers the importance of proper grading and packing of the crop.

The 1944 season was not a good one for blueberries, for heavy frosts damaged many of the blossoms and only a two-thirds crop was harvested. Prices were better, averaging \$0.215 a pound in Chicoutimi and Lake St. John, and \$0.195 in other parts of the province.

Origin of The Red Cross

The origin of the Red Cross was in Switzerland, where the symbol of the Red Cross was made by reversing the colors of the Swiss flag. In Canada the Red Cross had its beginning at the time of the Riel Rebellion, when Dr. E. Ryerson had aided the wounded and later became the first president of the Canadian Red Cross Society.



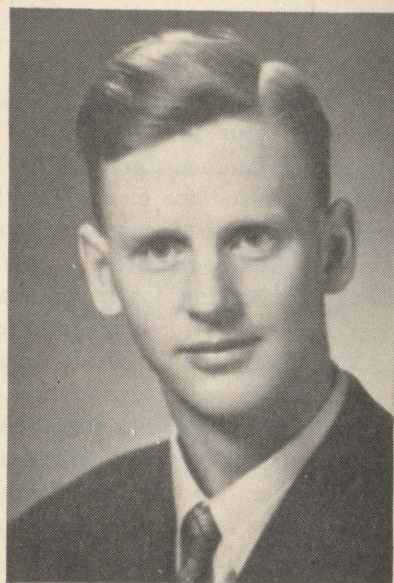
LIVING AND LEARNING



Rural Projectionist

Robert Taylor

In January 1942, Robert Taylor of Tomifobia in Stanstead County, became representative of the National Film Board under the direction of the Macdonald College Adult Education Service. During the past year, with the organization of a separate circuit in Pontiac and Gatineau Counties his work has extended into the Eastern Townships, his native territory. Mr.



Taylor attended High School at Fitch Bay and Windsor Mills, is a graduate of the Diploma Course and the Co-operative Short Course at Macdonald College. He was

active in his local Young Peoples Society and the Ayer's Cliff Community school. On the film circuits his chief interest lies in deriving the fullest possible stimulus from films in bringing about a better community life. He has promoted recreation and discussion as part of the National Film Board programs.

4 minutes, 20 seconds

The news broadcast of the provincial secretary of National Farm Radio Forum must be tailored to fit a space—4 minutes 20 seconds long.

About one hour is required for timing and rehearsal; about two hours to write the script. It takes six hours to summarize the Findings from the Forums.

Assuming that when 70 reports are received each secretary spends an hour preparing the report, that makes 70 hours work. And assuming that each 1,100 members spends a half hour in preparation and study and an hour in discussion at the meeting our total hours for members would be 1655 hours.

When you listen to a script that takes four minutes and twenty seconds to read, be sure to remember that this represents the co-operation and work of over eleven hundred people and 1734 hours of effort.

Thanks For Everything!

The provincial secretary voices appreciation to the Farm Forum.

It is 80°F in the sun to-day. Where there is earth, it is dried to an ashen white, asking for stimulation and attention. Where there is sod, there is a hesitant but unmistakable green. The river is free of ice, and the robins are mating and building.

The air is heavy with those eternal promises that are part of the Good Friday and Easter season. To one who loves the farm, this weather creates special problems; an office is a prison, a desk with its letters to be answered and a buzzing telephone are tyrants. There is the garden to tend, of course, but the lack of mechanization, and the small spaces, not only cramp the back, they cramp the spirit. To-day, our mail box was full of letters—most of them contained the questionnaire which we must study and then send quickly to Toronto for the National Office to analyse and tabulate. As much as the sun and wind, these questionnaires (arid and yellow, yet full of wisdom and thoughtful suggestions from Farm Forum) remind us the weekly Greenleaf newsletter need not be written, on Tues-

day; the Findings need not be summarized on Saturday, the broadcast need not be written and delivered on Monday. The not always easy demands for information need not be satisfied. In short, the season is over; and a co-operative effort in education and community betterment are at an end.

At least, one phase is at an end. Afterward we will have rallies, and many of us will meet on June 2nd, at Macdonald College. One looks back over a winter's work. So much of it is shared by the staff in our office here, so very much shared by the Farm Forum secretaries, chairman and members. Supporting every move were the members of the Quebec Council of Farm Forums, the Quebec Department of Agriculture, the Co-opérative Fédérée, and the staff of Macdonald College.

Nor was the work entirely provincial in scope. The Canadian Broadcasting Corporation, the National Office, the Canadian Association for Adult Education, the National Film Board and the staffs of each, all did their share. So one looks back over a winter's work, only to realize how much was done by so many. The least one say to all is "Thanks for Everything."

What the Farm Forums are Doing

Dundee in Huntingdon: Part of the evening was spent in discussing what our Forum ought to do. We have had meetings and discussions but as far as action is concerned we haven't done a thing. Several things were talked about, but it was decided that we couldn't do anything until we had some funds, so the Forum decided to put on a play or minstrel show or some form of entertainment to try and raise some money. After that is done we will figure how to spend it. We played cards and enjoyed some violin music for the rest of the evening. Lunch was served by the hostess Mrs. A. H. Fraser.

North Clarendon in Pontiac: In order to get to our Farm Forum last night, some of the members had to break roads and open fences in the field to get there as the main roads were impassable.

Our apologies to North Clarendon as Austin, also a stalwart group was credited with over-coming these difficulties on the broadcast of March 26.

Brooklet in Huntingdon: Further plans were made for the development of school Fair to be held this coming summer.

Albert Mines in Sherbrooke: It was planned to hold our next and final meeting at the schoolroom and elect new officers and to take up a collection to be used for prizes for the end of the school term and to assist the library.

Cowansville in Mississiquoi: Our last weekly meeting for the season was very interesting and every one is looking forward to the summer meetings. We have been invited to East Farnham for the Fourth Night. Many thanks for information on maple sugar and egg grading. Mr. Muray Mason invited Cowansville to attend a picnic this summer with Fordyce. A card of sympathy was sent to Mr. G. A. David and family for the loss of their daughter.

The Journal and the Farm Forum office extend their deepest sympathy to the David Family who have been energetic members of the Fordyce Farm Forum and Mississiquoi Community School, Cowansville for many years. Mr. David is the secretary of his forum.

Glenday in Sherbrooke: We are beginning to feel the need or rather the desire of these neighbourly meetings during the summer. Tentative plans for same will be brought up next week.

Eaton Road in Sherbrooke: Our rural electrification project was discussed after our questions were answered. A co-operative system for this district was the topic.

Low Forest and Kingsley: After the discussion which was very interesting on this series we took up a silver collection for the Red Cross which amounted to \$5.56.

Trout River in Huntingdon: After the discussion we held an impromptu program everyone taking part from 9 years up. We had violin, guitar and piano selections, jokes, readings, recitations, stunts, and everyone enjoyed it. We found we had latent talent in our group we did not know of.

Byrd District in Richmond: One of the members of this group last Sunday was forced to call six doctors to get one to visit his baby which was very sick. This might be brought to the attention of people who talk about a better health program.

Crystal Falls in Argenteuil: At our last two meetings we are glad to have one of our boys (who was wounded twice overseas) back with us.

Clarendon in Pontiac: Activities at our last meeting were taking steps to get our school remodeled.

BARTON . . . (Continued from page 2)

this year. For all varieties of wheat, it is 14 bushels per acre from your authorized wheat acreage. Contrast this government attitude toward wheat deliveries with the increasing demand for meat. The whole world is short of meat. Canada has been one of the important sources of meat supplies for war needs. . . . What is more, the Armed Services are asking for larger quantities, liberated countries are pressing for minimum needs, UNRRA is unable to obtain them, and the overall supply of meat is shrinking.

Isn't it to coarse grains, then, that Western farmers should turn in order to restore their income threatened by a reduced quota on wheat deliveries? There is a continuing good market for oats. And there is a ready market for barley, either as barley or when marketed in the form of hogs.

Countries which have been occupied by the enemy can quickly restore their output of wheat. And much of liberated Europe is natural grain growing country. Within the last year, the Soviet Union has regained possession of a huge area known as "The Bread Basket". Within three months from now it will be possible there to begin the harvest of winter wheat. But to restore ravaged herds of livestock may take even the most energetic nation a number of years. For at least two of those years, Britain is prepared to take all the animal products we can export.

Another food which Canada produces for export is in equally strong demand. I refer to dairy products. An outlet for these, too, is assured. As long as Canada can export 100 million pounds of cheese a year — and we are now exporting more than that — there should be no concern over our present milk production glutting a market which has never enjoyed the dairy products it should.

Coarse grain production is the corner-stone of animal and dairy products production. By increasing the acreage in coarse grains, we can hope to breed more sows to produce more pigs, to feed and milk cows in the numbers we shall have them, to finish cattle and lambs now on the way, and to maintain our poultry industry.

If, in planning production for this year and next, Canadian agriculture chooses the road to export markets, the road of maximum contribution to world food needs, and the road to a balanced agriculture, it can march confidently toward the future.



THE COLLEGE PAGE

Pro Patria

"Bud" Brittain Gets D.F.C.

Squadron Leader William Bruce (Bud) Brittain, son of Dean and Mrs. W. H. Brittain, has been awarded the Distinguished Flying Cross.

Bud enlisted in the R.C.A.F. on July 18th, 1941, about a month after he had graduated from the School for Teachers. He got his wings on March 27th, 1942 and then (much to his disgust, for he was anxious to get into action) he was kept at Camp Borden as an instructor until



July 1943, getting his commission while there. He finally managed to get overseas in September, 1943. Promotions followed one another in rapid succession, and he was made Squadron Leader on January 5th, 1945.

He was reported missing after air operations on February 15th, but has turned up safe and sound in England, word of his safety having been received April 2nd, to the great relief of everybody who knows him.

Science for the Welfare of the People

by Dr. F. S. Thatcher

New organization of scientists forms branch at Macdonald

To the great majority, the word science has come to mean almost the same as progress. The immense value of scientific advances to the allies during warfare has been made clear to everyone. Hitler himself is reported to have said over a year ago that the German submarines lost the battle of the Atlantic due to *one* invention—Radar. That handful of men whom Churchill said, "Never has so much been owed by so many to so few", achieved its unprecedented success in smashing Hitler's air armada by—radar. Think, too, of the thousands of lives saved by the use of blood plasma—human blood serum dried to a powder without destroying its life-giving qualities; the "sulfa" drugs, new developments in surgery; the "harnessing" of molds and bacteria to set their microscopic factories to work producing substances valuable to man: their remarkable germ-killing substances — penicillin that among other things promises to do more towards stamping out venereal

disease than centuries of moralising, the new "streptomycin" that destroys many germs that penicillin does not affect, butylene glycol from bacteria to make synthetic rubber or anti-freeze, alcohol in the billions of gallons for our war-machine, glycerine, and many other chemicals, fats, and proteins to feed starving Europe: all by guiding "nature" to work for us. Think of the study that has gone into the production of the improved varieties of crops, the disease-resistant-strains, artificial insemination that may before long make it possible for every farmer to own "prize" stock: these, and the many more obvious scientific developments that surround us, have come only from intense study and patient research. But what is Canada's contribution to this march of progress? During the war Canadian scientists have done much for the Allied war effort. But what after the war? The per-capita expenditure in Canada on research is just a small fraction of what Russia, Great

Britain or the United States is spending. Will there be adequate opportunity for the young Canadian scientists to do research in their own country, and can they earn an adequate and dependable return for their efforts? If we are to be frank we have to answer, "no", in many instances.

To Keep Best Brains in Canada

Many of the better brains among young Canadian scientists are already planning to travel South as soon as war-time restrictions permit. Why is this? First, many Canadian laboratories lack the scientific apparatus and facilities for many types of research, and departmental budgets are frequently too small or too unstable from year to year to maintain sufficient scientific personnel to tackle some of the more difficult problems. Secondly, salaries for research workers in Canada are frequently very much less than those paid to men in similar positions in the United States. Of a nation's resources, one of the most valuable is its trained brain-power. Canada cannot afford to waste this resource.

In Great Britain exists an organisation of over 15,000 scientists known as the Association of Scientific Workers. To this belong a high proportion of the internationally known scientists of that country. Branches exist in our sister Dominions in South Africa, New Zealand and Australia. Similar organisations exist in the United States. Last year the Canadian Association of Scientific Workers was formed. Over a dozen branches across the Dominion are already actively working for the welfare of Canadian Science, and during the past month a branch has been formed at Macdonald College. The aims of this Association are to work for the establishment of a system of research in Canada whereby the problems to be solved shall be worked at on an organised and interrelated basis, and adequate facilities and assistance provided for good men to carry out the researches for which they are best qualified. Research should be financed from a centralized source of funds, which means that the Federal Treasury would be the major contributor. The Association considers that by such means research can be carried out with the greatest probable degree of success.

The Association also seeks to make sure that the results of scientific study and research shall be used in such a way as to provide maximum benefit for the community as a whole. Important discoveries should be used for the common good, not for any ulterior aim. Every research worker knows — what is doubtless true for most other workers — that the most effective mental effort is only accomplished by individuals enjoying a reasonable degree of financial

independence. Good research is not expedited by having to worry about paying rent or doctor's bills, and, hence, the Association seeks to work for the welfare of the scientific worker, and as a step towards fulfilment of this aim intends to secure the right of the Association to function as a collective-bargaining agency.

Post-war Research in Agriculture

An important objective of the C.A.Sc.W. is to aid and co-operate with any other organisation with similar aims, and to this end the Macdonald College Branch of the C.A.Sc.W. has approached the Canadian Society of Technical Agriculturists (C.S.T.A.) with a view to collaborating with them on compilation of a plan for post-war research in Agriculture. The C.A.Sc.W. from its branches across Canada intends to prepare a unified brief on post-war science in Canada in several fields of scientific endeavour, of which Agriculture is one. The Macdonald Branch of the C.A.Sc.W. believes that it is definitely desirable to have expert agriculturists from the C.S.T.A. to co-operate in this, and believes, also, that to have well-prepared plans for agriculture submitted on "a par" with those from other sciences would be an advantage to agriculture in general, in that science in agriculture, from many points of view, is not accorded the prestige of science in other fields; neither are salaries to scientists in agriculture commensurate with those encountered elsewhere. Other scientists, perhaps as badly as anyone, need education in the appreciation of scientific problems and scientific requirements in agriculture.

A sincere attempt has been made by the Macdonald Branch of the C.A.Sc.W. to co-operate with the C.S.T.A. in this way as an expression of a practical implementation of the Association's aims.

College Cow Adds to Lifetime Record

The Holstein cow Macdonald Oleana Supreme completed her seventh consecutive R.O.P. record in February. She produced 18,839 pounds of milk on three times a day milking with the following tests: 4%, 3.8%, 4% and 4.3%. The total of her seven lactations is 123,412 pounds of milk, and when the final computation for fat is made it is expected it will be above 4%.

This cow is the dam of the bull calf, Macdonald Rag Apple Ajax, (whose sire is Montvic Rag Apple Ajax), that was sold in the All-Canadian Holstein Sale in November, 1944. The bull was purchased for \$3,500 by the Waterloo Artificial Breeding Syndicate, Waterloo, Ont.



THE WARTIME PRICES AND TRADE BOARD

FARMERS' BULLETIN

SEED POTATO PRICES

A new order covering seed and table potato price ceilings, effective March 26, 1945, clarifies previous orders. While making no change in the present price schedules on table stock it sets a definite basis for payment of premiums for seed potatoes in each zone.

Growers' prices for seed are: certified seed, one cent above the price for No. 1 grade table stock; foundation A, one and a half cents above the price for No. 1 grade table stock; foundation, two cents above the price for No. 1 table. The order also provides definite wholesale and retail margins in handling seed, on the same basis as the present markup allowed on table stock. While providing a price schedule at stated basing points in each zone, the order allows the addition of transportation costs where sales are made in other points or centres.

FARM MACHINERY RATIONING

Farmers who dispose of used farm machinery without approval of their rationing officer, in the hope of replacing it later with new machinery, are warned that their application for new equipment will not be considered. This action was taken to eliminate abuses reported last year, when farmers rushed through seedling operations, sold used equipment for high prices and then applied for new equipment. Special efforts are being made to ensure ample stocks of repair parts so that present equipment can be kept in operation. By continued co-operation of all concerned it is expected there will be enough new machinery to fill essential needs.

FROZEN EGG PRICES

The subsidy of one cent per pound on frozen eggs, begun in 1943 when a shortage was anticipated, is discontinued as from April 1, 1945. A new order, also effective April 1, provides a uniform increase of one half cent per pound in the ceiling price of frozen eggs. The same price differentials between various points and between the producing season, April and May, and the rest of the year, are maintained.

SUGAR RATION COUPONS

Rural housewives are reminded that while the first two of the twenty extra preserves coupons, available for the purchase of sugar for canning, became valid March 15, they remain valid until further notice and need not be used immediately. Although the extra preserves coupons are intended, primarily, for the purchase of canning sugar, they may be used instead to buy maple syrup or any other preserves. On May 17, a further eight extra preserves coupons will become available for the purchase of sugar for canning and the remaining ten are valid on and after July 19. Each of the twenty extra preserves coupons is good for the purchase of one half pound of sugar, bringing the total to ten pounds of sugar for canning, the same as in 1944. Any or all of the valid preserves coupons may be used for the purchase of one half pound of sugar. An additional sheet of coupons will be used when the first sheet of preserves coupons is finished.

SHEEP SHEARING EQUIPMENT

A fairly good supply of sheep shearing equipment is available this year. The number of units to be distributed is based on the recommendation of the Western Agricultural Engineering Committee and the distribution will be in accordance with the farm machinery administration policy — a proportion of sales during the years 1940, 1941 and 1942.

FARM SALES OF RATIONED PRODUCTS

Farmers selling rationed produce such as butter, maple syrup, maple sugar and honey are required to collect ration coupons from the purchaser and forward such coupons monthly to the rationing office. Farmers selling rationed produce must register with the Local Ration Board and will receive a Certificate or Registration and the necessary (RB-61) envelope in which to report their sales. It is illegal for farmers to use for their own purchases coupons collected through the sale of their own produce. Those who have already registered do not need to re-register.

For further details of any of the above orders apply to the nearest office of the Wartime Prices and Trade Board.

HOG PRODUCERS!

**A SOUND HOG INDUSTRY DEPENDS ON A
LARGE VOLUME OF CANADIAN**

BACON

ON THE

BRITISH MARKET

Whether or not the necessary volume of bacon is available depends on the individual producer of hogs.

Until the end of 1946, a satisfactory market is assured for all the bacon that Canada can produce. The export objective is 600 million pounds each year.

Practically all British consumers are now using Canadian bacon. Their continued use of it depends primarily on supply. Our present position can be used as a foundation for the future.

To this end, therefore, it is important that our wartime objective be reached and plans made for the years to come. The reasons are:

- (1) If Canadian bacon is not available to the British public regularly some other source of supply will be found.
- (2) If the volume of Canadian bacon is uncertain, or its quality inferior, British handlers will be in a position to impose price discounts. Regular supplies in volume will help to get the top British price.

Long term planning which will ensure annual volume in addition to quality production of hogs and bacon, is essential if Canada's hog industry is to remain sound in the years to come.

PLAN AHEAD

•

**THINK
IN TERMS OF
VOLUME
AS WELL AS
QUALITY**

AGRICULTURAL SUPPLIES BOARD

Dominion Department of Agriculture, Ottawa

Honourable James G. Gardiner, Minister